Introduction

his introduction contains a brief description of the purpose of these guidelines and an examination of their scope and use. Also included are a listing of the standards for meeting the unique educational needs of students with visual impairments and a description of the information contained in the appendixes.

Purpose of the Guidelines

The guidelines have been developed as a resource for parents, staff, and administrators in assessing, identifying, planning, providing, evaluating, and improving the quality and cost effectiveness of programs serving visually impaired students. These guidelines serve to:

- Clarify the processes for the identification, assessment, planning, and provision of instruction and services to meet the unique educational needs of students with visual impairments.
- Provide information that will assist parents, staff, and administrators in evaluating, improving, and maintaining quality programs.
- Provide criteria for the self-review and monitoring of programs serving students with visual impairments.

The standards discussed in this publication have been established to serve as a model framework of expectations for the identification, assessment, planning, evaluation, improvement, and provision of instruction and services to students with visual impairments. This document contains guidelines to assist local programs in meeting these standards and is not intended to impose additional mandates beyond those already existing in the state and federal laws or regulations.

Scope of the Guidelines

These guidelines focus on the unique educational needs of students with visual impairments. All instruction and services provided to those students must be planned and coordinated to meet their needs and strengths. Close cooperation and coordination among all agencies, programs, and individuals assessing and providing instruction and services are the keys to meet-

ing these needs successfully and to improving local programs.

The following areas of need are not included within the scope of this document unless they are affected by a student's visual impairment:

- Core curriculum, courses of study, proficiency standards, and standards of behavior and discipline. (It is expected that the student with a visual impairment should as much as possible meet the standards and expectations for all students.)
- Needs resulting from an additional disability or disabilities. (These needs are so varied and complex that they should be addressed by using a multidisciplinary or transdisciplinary approach, as appropriate.)
- Other special needs, including those served by these programs: bilingual education, compensatory education, gifted and talented education (GATE), and migrant education. (These special needs are also complex, and they may or may not be affected by a student's visual impairment, depending on the individual student.) Persons needing more information about these programs may wish to contact the Department of Education for technical assistance. (See Appendix G, "Resources for Technical Assistance.")

Use of the Guidelines

This document was designed to be used in three major ways:

First, the use of these guidelines can help parents, staff members, and administrators to improve their effectiveness in understanding and meeting the needs of students with visual impairments. Recommended roles and responsibilities for parents, staff, and students appear in Chapter Four. Recommended roles and responsibilities for administrators are found in Chapter Five. These chapters include references to other sections in this publication that may be particularly helpful to these key individuals.

Second, these guidelines can serve as a tool for improving the effectiveness of programs in meeting the needs of students with visual impairments and in making maximum use of available resources. A discussion of program improvement, including program review and evaluation, is found in Chapter Five. (Also see Appendix A, "Self-Review Guide.")

Third, these guidelines provide references for information and resources to assist parents, staff members, and administrators in improving both individual and program effectiveness. The guidelines and the appendixes can be used for:

- Obtaining basic information and suggestions regarding the identification, assessment, and provision of instruction and services to students with visual impairments
- Reviewing pertinent legal requirements (See Appendix F.)
- Identifying sources of funding and materials and equipment (See Appendix E.)
- Using local, state, and national resources (See Appendix G.)

Standards for Meeting Unique Educational Needs

Standards for meeting the unique educational needs of students with visual impairments are discussed in chapters three, four, and five.

Standards in Chapter Three

In Chapter Three information relating to the following standards is presented:

- Procedures have been developed for locating and referring students with visual impairments who may require special education, including possible referrals from the vision screening program.
- The assessment of a student with a suspected visual impairment involves, where appropriate, the following areas related to the student's disability: vision/ low vision, concept development and academic skills, communication skills, social/emotional skills,

These guidelines can help parents, staff members, and administrators to improve their effectiveness.

sensory/motor skills, orientation and mobility skills, daily living skills, and career/vocational skills. Assessment also involves determining the appropriate reading/learning media.

- The assessment of students with visual impairments is conducted by qualified personnel who are knowledgeable about the disability.
- The assessment report identifies the student's unique educational needs related to the visual impairment, including needs for specialized services, equipment, and materials.
- Those assessing students with visual impairments consider the variables that influence individual needs. These include, but are not limited to, variables related to:
 - Students with congenital or adventitious visual impairments
 - Visually impaired students with multiple disabilities

Infants and preschool children

Elementary school and secondary school students

The nature of the student's visual impairment

Students who are functionally blind or have low vision

Students with other special needs

Standards in Chapter Four

In Chapter Four information relating to the following standards is presented:

• The assessed unique needs of students with visual impairments form the foundation for developing the individualized education program (IEP), the individualized family service plan (IFSP), or the individualized transition plan (ITP); for providing appropriate specialized instruction and services; for providing materials and equipment; and for developing curriculum in the following areas:

Concept development and academic needs

Communication needs

Social/emotional needs

Sensory/motor needs

Orientation and mobility needs

Daily living skills needs

Career/vocational education needs

 The following key individuals who are involved in the identification, assessment, planning, or provision of instruction, services, or consultation to a visually impaired student understand the student's unique educational needs and possess the skills and abilities to carry out their roles and responsibilities in meeting those needs:

Teacher of the visually impaired

Classroom teacher (general, special class, or resource specialist)

Orientation and mobility specialist

Parent, guardian, or conservator

The student who is visually impaired

Eye specialist

Regular or adapted physical education specialist

Occupational or physical therapist

School nurse

Program specialist

Early childhood specialist

Specialist in career/vocational education

Language, speech, and hearing specialist

Technology specialist

Counselor, psychologist, or social worker

Transcriber (certified Braille specialist)

Reader

Aide/paraprofessional/instructional assistant

Ancillary staff in residential programs

 Coordination exists among all of the individuals involved in providing instruction and services to visually impaired students.

Standards in Chapter Five

In Chapter Five information relating to the following standards is presented:

Class size and caseloads of staff allow for providing specialized instruction and services based on the educational needs of visually impaired students.

- Each local or regional program provides for the delivery of appropriate instruction and services through a full range of program options and support services on a regional basis.
- Each visually impaired student is appropriately placed in the least restrictive environment according to his or her educational needs.
- Class size and caseloads of staff allow for providing specialized instruction and services based on the educational needs of visually impaired students.
- Each local, regional, or statewide program provides qualified staff who have the skills and abilities to conduct assessments and to provide instruction and services that meet the educational needs of visually impaired students.
- Appropriate staff development and parent education are provided according to a needs assessment that reflects the unique educational needs of the visually impaired student.
- Facilities are designed or modified to enhance the provision of instruction and services to meet the unique educational needs of visually impaired students.
- Materials and equipment necessary to meet the unique educational needs of students with visual impairments are provided as indicated by the IFSP/ IEP/ITP.
- Transportation for students with visual impairments is suitable to the unique health and safety needs of visually impaired students.
- Each local, regional, or statewide program serving students with visual impairments has an ongoing process to evaluate its effectiveness and improve the identification, assessment, planning, and provision of instruction and services to meet the unique educational needs of these students.

Content of the Appendixes

Appendixes A through H and the glossary provide additional information and sources of assistance for the reader.

Appendix A, "Self-Review Guide," can assist parents, staff, and administrators in evaluating and improving the effectiveness of local programs in meeting the standards presented in these chapters. The "Self-Review Guide" can be used to:

- Conduct an internal or external review of the program.
- Identify areas and establish goals for program improvement.
- Identify possible topics for local evaluation studies.
- Identify needs for technical assistance.

Appendix B, "Assessing Vision/Low Vision," contains information on variables to consider about the range of visual impairments, functional vision assessment, functional vision assessment, functional vision assessment of preschool children, and assessment by a qualified eye specialist. Sample forms in this appendix are "Registration of Visually Handicapped Students," "Eye Report for Children with Visual Problems," "Preferred Visual Acuity Notations," "Educationally Oriented Vision Report," and a "Functional Vision Assessment Checklist Summary."

Appendix C, "Determining the Appropriate Reading Medium," contains information about variables to consider and a checklist summary sheet for meeting the requirements of SB 2445 (effective January 1, 1995) in determining the appropriate reading medium for students with visual impairments.

Appendix D contains information about the California School for the Blind in Fremont, including the referral and admissions procedures, residential policy, and assessment program.

Appendix E, "Specialized Books, Materials, and Equipment," discusses where to find funding for specialized books, materials, and equipment and sources for obtaining them. Information on the American Printing House for the Blind Federal Quota Program is also provided.

Appendix F, "Legal Requirements," contains pertinent sections from the *Education Code* and from *California Code of Regulations, Title 5, Education* that apply to the

content of this publication. The purpose of this appendix is to give readers an opportunity to review important legal requirements that relate to the education of visually impaired students.

Appendix G, "Resources for Technical Assistance," lists addresses and telephone numbers from the California Department of Education and other resources in California and nationwide.

Appendix H, "The Early Start Program," presents information on legislation that created the Early Start

Program in California; Early Start intervention services and individualized family service plans; 14 basic elements of Part H of IDEA and California's Early Start Program; and key points for addressing the unique needs of infants, toddlers, and preschoolers with visual impairments.

The glossary contains definitions for terminology used in identifying visual impairments and in educating students with visual impairments; these terms may be unfamiliar to some readers of this publication.

Unique Educational Needs Related to a Visual Impairment

his chapter contains an examination of the unique educational needs of students with visual impairments. This information can be used as a general framework for identifying and assessing each student with a visual impairment (see Chapter Three) as well as for planning and providing instruction and services to meet the assessed needs (see Chapter Four) in the following areas: concept development and academic skills, communication skills, social/emotional skills, sensory/motor skills, orientation and mobility skills, daily living skills, and career and vocational skills. The information about unique educational needs identified in this chapter will provide valuable assistance for the teams involved in developing or revising the individualized family service plan (IFSP) and the individualized education program (IEP), including transition services language, often referred to as an individualized transition plan (ITP), as well as for those implementing these plans.

Concept Development and Academic Needs

Since a visual impairment will often impede the development of students' visual concepts and learning in academic subject areas, special concept development and academic skills, such as listening and study skills, will often be needed.

Concept development and academic needs that should be addressed include:

- Developing a good sense of body image
- Understanding the following concepts: laterality, time, position, direction, size, shape, association, discrimination, sequence, quantity, sensations, emotions, actions, colors (to the best visual ability), matching, and classifying
- Developing listening skills appropriate to the level of the student's functioning, including the development of auditory reception, discrimination, memory, sequencing, closure, and association skills
- Developing auditory comprehension and analysis skills appropriate to the level of the student's functioning, such as the development of the ability to summarize; classify; compare; recognize cause and effect; predict outcomes; visualize; understand

- character; understand setting; recognize feelings; recognize climax, foreshadowing, and purpose; and distinguish fact from opinion
- Becoming familiar with the format of, and knowing how to use, reference materials in the student's primary reading medium or media
- Being able to interpret accurately maps, charts, graphs, models, and tables
- Developing skills for note taking during a lesson
- Developing writing and recording skills for note taking from material originally intended for print;
 e.g., use of material that has been recorded or is read aloud
- Developing the ability to organize notes and other study materials
- Developing the ability to organize one's time
- Developing the ability to select and use a reader
- Being able to acquire materials in various learning media; e.g., braille, large type, aural media, or electronic format

Communication Needs

A student with a visual impairment will usually require alternative modes for instruction in reading and writing. He or she will need special skills in using alternative strategies, learning media, and specialized equipment and materials to communicate effectively. (See Appendix C, "Determining the Appropriate Reading Medium.")

Communication needs that should be addressed where appropriate include:

- Being skilled in reading, using appropriate modes (e.g., braille, print, or recorded format) for such purposes as gaining academic information and pursuing personal, career, and recreational interests
- Developing skill in writing for personal needs, using appropriate modes (e.g., braille, print, typewriting, handwriting, word processing) for such purposes as note taking, recording phone numbers and addresses, taking messages, and writing travel directions and personal notes

- Being proficient in typing and computer keyboarding skills
- Being able to write one's own signature legibly
- Being able to operate basic communication equipment, such as radios, talking book machines, tape recorders, phonographs, and CD players
- Being skilled in using a cassette recorder for recording lectures or for recording phone numbers and addresses
- Being cognizant of, and able to use, appropriate special devices for reading and writing, such as slates and styli; optical aids; closed-circuit television systems; electronic note-taking devices; computers adapted with speech, enlarged type, or braille; and other voice, video, and data information technology
- Being cognizant of, and able to use, appropriate special devices for mathematics and science; e.g., the abacus; talking calculators; electronic braille notetaking devices; specialized measuring equipment; and computers adapted with speech, enlarged type, or braille

Social/Emotional Needs

A visual impairment often affects a student's self-concept, observation of behavior in social situations, involvement in recreational activities, and sexuality. The student with a visual impairment will, therefore, have special needs for socialization, affective education, recreation, and sex education. These students will also need to learn to deal with the psychological implications of the visual impairment.

Socialization

Socialization needs that should be addressed include:

- Understanding and displaying acceptable social behavior appropriate to a variety of group situations
- Being able to discriminate between those behaviors that are socially unacceptable in public yet acceptable in private
- Understanding and exhibiting appropriate assertiveness techniques in a variety of situations

Students with visual impairments need to understand the difference between allowing others to help when it is not needed and deciding to ask for help when it is needed.

- Being aware of and using appropriate nonverbal communication techniques; e.g., gestures, eye contact, raised head, and facial expressions
- Being aware of and being able to control body posture, movement, and physical mannerisms in an acceptable, coordinated manner
- Being aware of and using proper manners in eating and other social situations
- Being able to make introductions properly and demonstrate appropriate conversational skills
- Being prepared to contribute constructively to group activities and social situations
- Being aware of appropriate social distances for various communication situations
- Being aware of dress codes for specific groups and occasions and dressing appropriately for one's age and situation

Affective Education

Affective education needs that should be addressed include:

- Recognizing that each person is unique and different from every other person
- Understanding that persons who are visually impaired have the same emotions as everyone else
- Being able to identify one's feelings
- Being able to express one's feelings to others directly and in a socially acceptable manner
- · Having feelings of self-worth and well-being
- Recognizing one's own strengths and weaknesses in a realistic manner
- Acknowledging both positive and negative feelings in oneself and in others and understanding that both types of feelings are legitimate
- Being able to identify and appropriately express one's likes and dislikes
- Being able to understand and recognize teasing and developing appropriate ways of handling it
- Being aware of alternative ways to respond to the feelings and behavior of others
- Feeling that one is a valuable, contributing member of society

- Being able to identify and understand a wide range of feelings in oneself and in others; e.g., happiness, guilt, frustration, boredom, confusion, anger, embarrassment, and pride
- Being aware that the way a person feels about himself or herself is reflected in the way he or she treats others
- Being aware that each person must establish his or her own set of values and live by them
- Being aware of the concept of peer pressure and determining the appropriateness of conforming to peer pressure
- Being able to identify and share feelings about his or her visual impairment in relation to being accepted by one's peers
- Understanding the ways in which a person can become victimized by allowing others to make choices in his or her life
- Understanding the long-range results of too much dependence on others
- Being aware of the connection between being in control of one's life and taking responsibility for what happens in life
- Being able to feel comfortable asking for help from others when it is appropriate
- Understanding the difference between allowing others to help when it is not needed and deciding to ask for help when it is needed
- Being an effective self-advocate

Recreation

Recreational needs that should be addressed include:

- Being familiar with a variety of social and recreational activities
- Being able to participate in a variety of different recreational activities with a group and on an individual basis
- Realizing that many options are involved in deciding how to spend one's leisure time
- Learning to play indoor and outdoor games appropriately; e.g., ball, cards, and roller skating
- Developing hobbies of individual interests; e.g., arts, crafts, music, or collections

- Being competent in several different recreational activities
- Learning about popular spectator activities in order to enjoy attending them and to be able to discuss these topics appropriately
- Being aware of opportunities for participation in recreational activities in the neighborhood and in the community in addition to those designed specifically for persons who are visually impaired; e.g., YMCA or YWCA, neighborhood parks and centers, scouting, and school and social clubs
- Being aware of current recreational trends and being able to participate where appropriate; e.g., learning current dance steps or fad games

Sex Education

Sex education needs that should be addressed include:

- Being able to identify with his or her own gender
- Being knowledgeable about appropriate grooming and personal hygiene techniques
- Being able verbally and tactually, with the use of models, to identify human male and female body parts and organs of the reproductive system, using correct terminology
- Being knowledgeable about appropriate child care procedures and adaptations that may be necessary for a parent who is visually impaired through contact with real infants and children
- Being aware of verbal and nonverbal communications that relay sexual messages to others; e.g., the use of body language
- Being knowledgeable about strategies for prevention of physical and sexual abuse, including inappropriate touching and rape
- Being knowledgeable about the genetic factors related to some visual impairments that one should consider before having children and being aware of genetic counseling
- Being aware of the responsibilities associated with premarital sexual relations, marriage, and parenthood
- Being able to express and discuss any concerns related to one's visual impairment and relations with

the opposite sex; e.g., dependency, not being able to drive, financial concerns, and genetic factors

Psychological Implications

How well a student understands and accepts his or her visual impairment can be determined by addressing the needs in this area, including:

- Being able to recognize that one has a visual impairment
- Being knowledgeable about one's own eye condition
- Being able to explain one's eye condition and visionrelated needs to others
- Understanding the vision process
- Understanding and accepting any physical limitations caused by the visual impairment
- Understanding how low vision aids can assist in improving visual abilities and accepting the use of appropriate low vision aids
- Accepting the use of alternative techniques and apparatuses for obtaining sensory information, where appropriate; e.g., use of braille, tapes, and the long cane
- Being knowledgeable about personal eye care; e.g., medications, hygiene, regular eye exams, and low vision assessments
- Having realistic knowledge of current treatment as it relates to one's visual impairment

Sensory/Motor Needs

A visual impairment may affect one's gross and fine motor skills; alternative sensory discrimination and sensory integration skills; and abilities to develop appropriate posture, balance, strength, and movement. The student with a visual impairment may need to develop special skills in these areas.

Sensory/motor needs that should be addressed include:

- Learning to control the head, limbs, and body for purposeful exploration and movement
- Learning to sit, crawl, stand, and walk independently

The student with a visual impairment will need special skills to understand and become oriented to various environments.

- Learning to control the head and body while sitting, crawling, standing, and walking (While walking, the student should exhibit appropriate gait, stride, and posture.)
- Developing the ability to balance while standing still and while in motion
- Using gross motor skills, such as crawling, walking, exploring for objects, negotiating stairs, negotiating depth changes, opening and closing doors, and pushing and pulling objects
- Developing fine motor skills, such as grasping and releasing objects of varying sizes and shapes, turning door handles, grasping a cane, and dialing a phone
- Developing sufficient muscle relaxation and flexibility to perform basic daily living and mobility skills safely, efficiently, and gracefully
- Developing sufficient strength, stamina, and endurance to complete routine mobility, physical fitness, and daily living skills tasks
- Learning to identify, discriminate, and use various textures and objects tactually and underfoot
- Learning to identify, discriminate, track, and use continuous and intermittent auditory sources indoors and outdoors
- Learning to identify, discriminate, and use various kinesthetic and proprioceptive sources indoors and outdoors, such as changes in temperature, movement of air currents, or height of slopes and depth changes
- Learning to identify, discriminate, and use various olfactory sources indoors and outdoors

Orientation and Mobility Needs

A visual impairment usually affects how the student learns about and functions within various environments. The student with a visual impairment, therefore, will need special skills to understand and become oriented to these environments and to move, travel, and play independently and safely within them.

Orientation and mobility needs that should be addressed include the following:

- Developing a conceptual understanding of:
 - **B**ody image; e.g., planes, parts, laterality, and directionality in relation to objects and environmental features
 - Concrete environmental concepts; e.g., grass, lawn, cement, wood, carpet, tile, tree, bush, and street
 - Spatial concepts; e.g., far, near, close, high, low, above, below, facing, in front of, behind, beside, away from, next to, forward, backward, sideways, and 90-, 180-, and 360-degree turns
 - Compass direction concepts; e.g., north, south, east, and west relationships, sides of streets, names of corners, and relationships among changes in direction
 - Traffic and traffic control concepts; e.g., fast, slow, parallel, perpendicular, same direction, opposite direction, near side, and far side
- Learning to travel independently at home and at various school settings throughout one's school career
- Learning appropriate trailing and protective techniques and techniques for locating objects to facilitate independent orientation and mobility at home and school
- Learning to use appropriate sighted guide skills in all travel situations when needed, such as traveling in normal situations; going through narrow passages; ascending and descending stairways; using escalators and elevators; switching sides; seating oneself in chairs, in sofas, and at tables; and establishing and maintaining control of the sighted guide situation with familiar and unfamiliar guides
- Learning to use remaining vision and distance low vision aids, as appropriate, to the maximum extent possible for independent, safe orientation and mobility
- Learning to use the long cane appropriately to supplement or replace visual travel skills (Skills to be acquired are basic grasp and hand and arm position; touch technique; use of the cane at closed doorways and stairs and in congested areas and in social situations; trailing techniques; and modified touch tech-

- nique for location of drop-offs; e.g., curbs or down staircases.)
- Developing an understanding of the importance, dangers, responsibilities, and behavior appropriate for independent travel in increasingly sophisticated settings
- Learning to become oriented and travel independently in residential and rural areas (Examples of skills are traveling along a residential sidewalk; traveling past driveways and walkways; locating curbs and wheelchair ramps; recovering from veering; crossing residential streets; recognizing and recovering from a change in direction on street crossings; using environmental tactile, auditory, kinesthetic, or olfactory cues, compass directions, maps, and spatial relationships for orientation and safe mobility in familiar rural or residential areas; and becoming independently oriented to an unfamiliar area.)
- Developing an understanding of the services various business establishments provide; e.g., grocery stores, department stores, banks, post offices, and shopping malls
- Learning the skills necessary to become oriented and to travel independently in light and major metropolitan business areas:
 - Using traffic sounds to establish, maintain, or regain orientation and line of travel
 - Traveling safely and appropriately on increasingly busy business area sidewalks
 - Crossing independently intersections of four lanes or more controlled by traffic lights
 - Exhibiting appropriate verbal and physical public behaviors
 - **D**eveloping the ability to seek out and interact appropriately with the public for assistance in orientation or mobility as needed
 - Learning to use address systems as an aid to orientation

- Carrying identification and emergency funds when traveling
- Knowing whom to contact in case of emergency or disorientation
- Knowing how to locate and use a pay phone (dial or push-button)
- Learning to locate independently various destinations in business areas
- Learning to travel safely in various retail and service establishments, including independent travel on escalators and elevators
- Learning to carry out increasingly complex personal business transactions independently
- Understanding and being able to use public transit systems
- Learning to acquire information regarding products, services, or location of various stores and businesses by using the telephone, including recording this information for later referral
- **B**eing able to recognize and safely travel past areas of road construction
- **B**eing able to negotiate railroad track crossings independently
- **B**eing able to travel independently within light or major metropolitan business areas at a level sufficient to carry out tasks necessary for basic survival
- Developing, if nonverbal, a feasible communication system for acquiring information and communicating needs
- Learning to use adaptive mobility skills as necessary for use with ambulatory aids, such as wheelchairs, walkers, braces, and orthopedic canes, to provide for maximum independent mobility; e.g., bus lifts or rail ramps
- Use of alternative mobility devices when appropriate
- Being able to develop and travel alternative routes and, if necessary, travel specific routes in limited areas to care for basic needs

The visually impaired student will often need special techniques to function as independently as possible.

Daily Living Skills Needs

Since a visual impairment affects the student's ability to live independently, the student with a visual impairment will often need special techniques to function as independently as possible. Assessment and instruction to provide needed daily living skills should include those needs as follows:

Performing personal hygiene skills:

- Performing basic personal hygiene tasks; e.g., toileting, care of teeth and hair, and bathing needs
- Using personal service businesses to care for one's own needs and to make appointments; e.g., for barber or beauty shop services (These activities are for students who are beyond the basic skill level.)

Performing dressing skills:

- Dressing and undressing, including tying shoes and fastening buttons and zippers
- Selecting appropriate clothing and planning clothing purchases

Caring for one's own clothing:

- Using techniques for clothing storage and identification of colors and patterns, sorting laundry, and using a washer and dryer
- Using services such as shoe repair, performing minor repairs on clothing, and hemming and ironing clothing

Practicing housekeeping skills:

- Locating and using housekeeping areas in the home, such as the kitchen, dining area, and bedroom; and assisting in basic upkeep, such as putting out trash and setting the table
- Performing many basic housekeeping tasks, such as vacuuming and scheduling regular maintenance
- Being able to make basic home repairs

Preparing food:

 Identifying kitchen appliances and performing basic pouring, stirring, measuring, and spreading techniques Using kitchen equipment, such as a stove and oven; preparing and cooking menus; following recipes; and preparing complete meals

Practicing eating skills:

- Locating food on the plate
- Using utensils properly; being familiar with passing food, serving oneself at buffets, and using cafeterias; ordering food from restaurant menus; and understanding tipping

Managing money:

- Identifying coins and knowing coin equivalents
- Handling money in public, planning a budget, using checking and savings accounts, using automatic teller machines (ATMs) and other electronic banking and money management systems, and having one's own system for money management

Practicing social communication skills:

- Conducting basic social interactions, including communicating needs
- Conversing appropriately with familiar persons and strangers

Practicing skills in using telecommunications:

- Identifying one's own telephone number and placing an emergency call
- Using directory assistance, using various types of telephones for personal and business calls, arranging for one's own telephone service, and displaying good telephone etiquette
- Understanding fax communications and E-mail

Practicing written communication skills:

- Understanding that written communication is used to convey information and ideas
- Writing a signature and personal and business letters, using a system for recording information, and using basic office supplies correctly

Understanding changes in time:

 Responding to a daily schedule; knowing events that occur during the daytime compared to nighttime Knowing how to tell time and use clocks and watches, knowing automatic time (weeks or months), scheduling one's own time, and keeping appointments

Being able to organize systematically:

• Organizing time, activities, and personal belongings at home, at school, and in the community

Career/Vocational Needs

To be successfully employed, the student with a visual impairment will often need guidance to prepare for the world of work. Assessment and instruction in career awareness and vocational education, including adaptive skills, will often be needed for an individual to succeed in the workplace.

Some career/vocational needs that should be addressed include:

- Understanding oneself in terms of the characteristics and attributes that make up one's individuality and recognizing one's uniqueness as a person and building one's self-esteem
- Knowing the difference between work and play and when each is appropriate
- Understanding the importance of doing a job to the best of one's ability
- Understanding work ethics, including getting to work on time
- Understanding the necessity of responsibility and commitment in the workplace
- Being able to fill out a job application or giving the necessary information to another person
- Being familiar with the development and use of a resumé
- Knowing that money is a medium of exchange and related to work and developing concepts of financial management
- Knowing and using personal information skills, including a legal signature

- Maximizing one's capabilities in developing skills in technology and in using adaptive devices, such as computers, note-taking devices, and calculators
- Being familiar with jobs held by one's family members and the jobs available in the school and the community, particularly jobs held by visually impaired persons
- Experiencing hands-on work experiences through chores, paid jobs on or off campus or after school (particularly in the private sector), or in simulated work environments
- Being able to interact appropriately with supervisors, coworkers, and the public
- Participating in skill training at a job-entry level in a variety of experiences to assist in determining realistic occupational choices
- Determining postsecondary education needs: whether to attend college or technical school or go to work
- Knowing how to make contact with the Department of Rehabilitation for referral, training, and/or placement
- Being able to use and train readers
- Knowing sources for having materials transcribed and for obtaining specialized books, materials, and equipment
- Being able to organize time and materials to maximize learning
- Obtaining and managing financial assets for postsecondary education
- Being self-reliant in managing postsecondary education
- Being able to serve as one's own advocate in obtaining necessary services, adaptations, and equipment needed for success on a job, during job training, or in college
- Knowing and using laws prohibiting discrimination based on disability, including "equal access" and "reasonable accommodation"

Identifying and Assessing Unique Educational Needs

his chapter contains information about the eligibility of students with visual impairments for special education and a discussion of the identification of these students and an assessment of their unique educational needs. Descriptions of the requirements for assessment personnel and of the variables that affect the unique educational needs of students who are visually impaired also appear here (see Appendix F for legal requirements).

Eligibility for Special Education

To be eligible for special education, "a pupil has a visual impairment which, even with correction, adversely affects a pupil's educational performance." When an assessment of a student with a visual impairment determines that he or she has educational needs that cannot be met without special education and related services, this student is provided with instruction, specialized services, and materials and equipment in accordance with his or her individualized education program (IEP). (See Appendix H for eligibility requirements for infants and preschool children, ages zero to five.)

The term *visually impaired* includes, for educational purposes:

- Functionally blind students (who because of the severity of their visual impairment rely basically on senses other than vision as their major channels for learning)
- Low vision students (who use vision as a major channel for learning)

A visual impairment does not include visual perceptual or visual motor dysfunction resulting solely from a learning disability.

A student who has visual perceptual or visual motor dysfunction resulting solely from a learning disability does not meet the eligibility criteria for "visual impairment" or "low incidence disability" and is therefore not eligible for vision services or low incidence funding for specialized support services, books, materials, and

¹ California Code of Regulations, Title 5, Education, Section 3030(d). (See Appendix F.)

equipment available to a student with a low incidence disability.

A student who has visual perceptual or visual motor dysfunction may be eligible for special education and related services based on the "learning disability" eligibility criteria, but such a student is not provided vision services by a teacher of the visually impaired unless the student also has a "visual impairment." (See Appendix F for legal requirements.)

Identification of Students with Visual Impairments

How does the program ensure that students with visual impairments who may require special education are referred, including referrals from the vision screening program?

Identifying a student's visual problems at an early age is important. Local procedures to locate and refer individuals suspected of having a visual impairment include the following search activities:

- Coordination with the vision screening program (See Appendix G, "Resources for Technical Assistance.")
- Activities to inform staff members and parents of behaviors that may indicate a visual impairment
- Coordination with local eye specialists and other possible referral sources, such as regional centers and infant and preschool programs

Assessment of Visually Impaired Students

How does the program ensure that students with suspected visual impairments are assessed, when appropriate, in the areas related to their disability?

To identify all the unique educational needs of a student resulting from his or her visual impairment, those conducting the assessment must be sure that the initial comprehensive and ongoing assessments address, where appropriate, the areas that are included in Chapter Two. (See Appendix F for legal requirements, Appendix B for information that will be helpful in assessing a

student's vision/low vision, and Appendix C for determining the appropriate reading medium.)

The paragraphs that follow present a discussion of the assessment of students with visual impairments.

Reports on Vision

The assessment should begin with the report of an examination by an ophthalmologist or optometrist. It is important to acquire as much information from the eye specialist as possible. This information would be reported in the "Eye Report for Children with Visual Problems" and in the "Educationally Oriented Vision Report." Sample copies of both of these forms can be found in Appendix B.

The eye report should include:

- Near and distant acuity, with and without best possible correction
- Field of vision, including peripheral field
- The etiology and prognosis of the visual impairment
- The eye specialist's recommendations for school personnel and parents, including when the student should be reexamined

For students who are severely multiply impaired and whose vision may be difficult for an eye specialist to assess, information may be obtained from the eye specialist, from the student's pediatrician, or from other attending medical staff. Additional information could be obtained through electrodiagnostic testing (e.g., visually evoked response testing) and a functional vision assessment.

The "Eye Report for Children with Visual Problems" (see Appendix B) is also used as the basis for registering visually impaired students annually with the California Department of Education's Clearinghouse for Specialized Media and Technology (CSMT), which provides services for students with disabilities. This registration provides for the use of materials, aids, and equipment available through the American Printing House for the Blind. (See Appendix E.)

Low Vision

For students with some remaining vision, a low vision assessment is to be conducted in accordance with the

guidelines that are discussed in paragraphs that follow. (See Appendix F for legal requirements.)

A functional vision assessment is conducted by the teacher of the visually impaired, in coordination with the orientation and mobility specialist and the student's family, to determine the student's functional vision. (Appendix B, "Assessing Vision/Low Vision," contains more detailed information and sample report forms.) Medical information from an eye specialist and the parents' observations provide valuable information that will contribute to understanding how the student uses his or her vision.

The functional vision assessment:

- Determines what the student with a visual impairment sees functionally in a variety of educational situations and settings. It is a means of evaluating how and how well a student uses vision to gain access to and participate in expected educational and/or developmental tasks or activities, including apparent vision-related capabilities and limitations.
- 2. Evaluates how or when the visual impairment might adversely affect the student educationally—that is, interferes with, limits, or prevents learning or performance.
- 3. Evaluates the student's ability to move efficiently, safely, and independently in multiple environments (home, school, or community).
- 4. Provides one criterion for the determination of the appropriate reading medium. (See Appendix C, "Determining the Appropriate Reading Medium.")
- 5. Provides information to assist in the determination of necessary and appropriate learning media.
- 6. Identifies and indicates vision-related needs. These needs include the type of interventions or compensations which enable or enhance efficient visual functioning and access to instruction, such as:
 - Task modification; for example, adjusting time requirements
 - Instructional methods or modifications; for example, the teacher verbalizing while writing on the board

- Specialized materials and equipment; for example, braille, large print, low vision aids, electronic devices, or other assistive technology
- Environmental modifications; for example, preferential seating, lighting, and physical arrangements
- 7. Provides information to the educational team about the nature and extent of the need for specialized services related to the visual impairment.
- 8. Provides information to the educational team about the need for orientation and mobility services.
- 9. Informs the parents and educational team of the benefit of further assessment by an eye specialist, when necessary.
- 10. Complements the needed multidisciplinary exchange of information between educators, eye specialists, and parents.

When the functional vision assessment is being conducted, it will be necessary to consider apparent vision-related functioning and vision-related needs in conjunction with the impact of other known or suspected disabilities that may be interfering with learning and performance. The presence of the vision impairment may or may not appropriately, or adequately, explain educational difficulties which are observed or reported or both. A team approach, which includes information from staff and family, is recommended to understand behaviors and performance observed. This information is important to determine correctly and appropriately the kinds of educational interventions or compensations needed.

Once the functional vision assessment has been finished, a written report of the results is completed. Recommendations from the functional vision assessment report are made to the educational team, including the possible need for further assessment by an eye specialist: an optometrist or ophthalmologist who has training and expertise in low vision and who has available appropriate low vision aids and assessment equipment. (Appendix B, "Assessing Vision/Low Vision," contains more detailed information.)

Good communication skills are essential for a student to become successfully integrated into the school setting and later into society.

Communication Skills and Primary Reading and Learning Media

Good communication skills are essential for a student to become successfully integrated into the school setting and later into society. The assessment of communication skills for the visually impaired student begins with an evaluation of the reading (braille, large print, print, or aural) and writing (braille, print, or cursive) modes being used by these students, including the determination of the students' primary reading and learning medium or media.

One criterion used in determining the appropriate reading medium or media for visually impaired students who are functionally blind and who have the ability to read is the functional vision assessment (see "Low Vision" in this chapter). Each visually impaired student, as appropriate, receives an assessment to determine the appropriate reading medium or media, including the need for braille and braille instruction. This is a separate assessment, as outlined in Appendix C, and is completed after the functional vision assessment, as outlined in Appendix B. (See Appendix F for legal requirements.)

The *primary reading* medium is not the same as the primary *learning* medium because of the kind of learning and information made possible and the sensory "channel" that is used. It is important to determine, through a comprehensive assessment, not only which reading medium is appropriate and efficient for a particular student, but, more generally, which learning medium facilitates the student's acquisition of information, skills, and concepts to the maximum extent possible. Making this determination is important whether a student's present levels of functioning support the student's participation in a traditional academic program or, because a student has additional disabilities, in a functional skill program.

The *primary reading medium* refers to the reading modality (visual or tactual) that is used the most efficiently and consistently and that enables the student to have direct access to print, including spelling, syntax, grammar, format, and other information conveyed through written language. It is the printed medium that

provides a "hard copy" referent of the written word. Braille and print are reading media that enable the student to develop and acquire reading (and writing) literacy skills. Aural input is a learning medium that enables or supports the student's access to written language and that may be a primary or alternative learning modality; however, it is not a reading literacy medium. (See Appendix C.) Aural media *alone* do not make an individual literate.

The *primary learning medium* refers to the more efficiently and most consistently used format. It may include aural media (e.g., tape recording, reader, voiced software, or technology) as well as visual (e.g., print or large print) or tactual (e.g., braille or raised line) alternatives. The selection of a learning medium that may be considered a primary, secondary, or sole access modality depends on a student's preferences and the nature and extent of a student's cognitive and physical capabilities or limitations or both. A primary, secondary, or alternative learning medium may include one or more sensory modalities; and it should enable or enhance the student's access to and ability to learn efficiently information, skills, and concepts.

In addition to the areas discussed previously, the following communication skills areas should be assessed where appropriate:

- Typing/word processing
- Signature and cursive writing
- Familiarity with basic communication equipment;
 e.g., talking book machines, tape recorders, reading machines, and radios
- The use of computers adapted with speech, enlarged type, or braille as necessary
- The use of optical aids
- Closed-circuit television systems
- · Slate and stylus
- Abacus
- · Talking calculator
- Other equipment specially designed or modified for visually impaired students

Concept Development and Academic Skills

Although assessment and instruction in the academic subject areas are the major responsibilities of the classroom teacher, the students with visual impairments should be thoroughly assessed by the teacher of the visually impaired, in coordination with the classroom teacher, in academic areas, such as mathematics, reading, and language arts (particularly spelling). Such assessments will not only provide valuable information about the level on which the student is performing academically but will also provide the teacher of the visually impaired with an opportunity to observe how the student functions visually or tactually in academic tasks. When an assessment indicates that a student's errors are the result of unique educational needs related to the visual impairment, intervention by the teacher of the visually impaired is necessary.

Vision is the major channel through which students perceive their environment and the relationship of themselves and objects within it. Functionally blind and low vision students, therefore, often require appropriate instruction in concept development to progress from understanding concrete and functional levels of information to comprehending abstract levels of instruction. Assessment should, therefore, include the student's understanding of basic concepts:

- Spatial
- Temporal
- Ouantitative
- Positional
- · Directional
- Sequential

Because students with visual impairments must rely on their auditory sense for learning to a greater degree than do their sighted peers, an assessment of the students' listening skills should also be conducted, including the students' auditory perception, comprehension, and skills of analysis.

Study skills should also be assessed, such as:

- Using reference books and materials
- Interpreting maps, charts, graphs, and models

- Taking notes from both written materials and oral presentations
- Comprehending the whole, based on observations of the parts

Chapter Two contains a more comprehensive listing of unique concept development and academic needs.

Social/Emotional Skills

The assessment of social/emotional skills for the student with a visual impairment encompasses socialization skills, affective education, recreation, human sexuality, and the psychological implications of the visual impairment. The teacher of the visually impaired is familiar with and uses various formal and informal assessment methodologies to assess the skill levels in each of these areas. Tests of emotional functioning are administered by a psychometrist or credentialed school psychologist. The development of positive social and emotional skills is essential for students to function independently at home, at school, and as adults and to be effective in employment and interpersonal relationships.

Sensory/Motor Skills

The development of sensory/motor skills is essential if students are to benefit from instruction in orientation and mobility, daily living skills, prevocational and vocational skills, and physical education.

Various formal and informal assessment methodologies exist with which the teacher of the visually impaired and the orientation and mobility specialist are familiar.

Orientation and Mobility Skills

The development of orientation and mobility skills is essential if the student with a visual impairment is to travel independently in the school and in various community settings. The needs of students with visual impairments in this area are unique because vision loss requires these students to learn about their environment in a way that differs from that of students who are sighted. An assessment should address how the visual impairment affects the student's:

• Understanding of the physical environment and space

The needs of each student must be assessed and instruction provided so that he or she can learn as many independent living skills as possible.

- Orientation to different school and community environments
- Ability to travel in school and community environments
- Opportunities for unrestricted independent movement and play

Daily Living Skills

If students are to function independently at home and at school and as adults, the development of daily living skills is essential. An individual's ability to become independent will vary. The needs of each student must be assessed and instruction provided so that he or she has the opportunity to learn as many independent living skills as possible.

Assessment of daily living skills often requires a careful task analysis of the skill being evaluated since prerequisite learning may not have occurred. In addition, a student's level of ability in the assessed skill should be precisely specified in terms of the type and level of assistance the student needs to complete the skill. Chapter Two contains a more comprehensive listing of daily living skills needs.

Career/Vocational Skills

Since employment should be viewed as an important goal for each student who is visually impaired and the development of concepts in this area begins in early childhood, assessment and training must begin early and progress through four sequential stages: awareness, exploration, preparation, and participation.

Assessing and addressing the needs in all of the other areas related to this disability are important, since these needs directly relate to the student's ability to make the transition successfully from school to postsecondary education, vocational training, or work.

Assessment of career and vocational education programs should include prevocational skills (including work habits, attitudes, and motivation), vocational interests, and vocational skills. Assessment of needs and training to meet these needs will be aimed at achieving skills necessary for a range of employment possibilities. Chapter Two contains a more comprehensive listing of unique career/vocational needs.

Assessment Personnel

How does the program ensure that assessment personnel are knowledgeable about visual impairment?

To be knowledgeable about the disability of visual impairment, the persons conducting the assessment must:

- Have the necessary training and materials to assess appropriately the abilities of the visually impaired student.
- Be familiar with tests designed or adapted for individuals who are visually impaired.
- Be familiar with the methods of appropriately adapting or modifying tests for individuals who are visually impaired.
- Be aware of the availability of large-print and braille assessment materials.

Communication among persons conducting the assessment, including comments from the teacher of the visually impaired and recommendations from the parent and student, should precede the assessment in order to establish the most effective method of nondiscriminatory testing. Throughout the assessment process the teacher of students with visual impairments needs to be involved in identifying areas that should be addressed, including, but not limited to:

- Use of nondiscriminatory assessment instruments, as required by state and federal law
- Need for additional testing time
- Visual performance of the student
- · Low vision aids, if needed
- · Previous assessment
- Lighting requirements
- Print and picture size appropriate for the student
- Best positioning of materials
- Other assessment strategies
- Motivation of students
- Other special needs; for example, those of students who are bilingual or nonoral

Assessments must be administered by qualified individuals so that the desired data and educationally

When assessing the unique educational needs for each student and providing instruction and services, one must consider the variables that influence individual needs.

relevant information are obtained. Assessment instruments that require more specific skills, such as intelligence tests, should be administered by a qualified school psychologist. This person should be a valuable source of information. Teachers can use many formal and informal assessment tools and administer, score, and interpret these instruments. It is important that the manual of directions be carefully followed. The teacher of the visually impaired is a valuable resource person and should be consulted throughout the assessment process. (See Appendix G, "Resources for Technical Assistance," and Appendix F, "Legal Requirements.")

Assessment Report

How does the program develop assessment reports that identify a student's unique educational needs related to the visual impairment, including needs for specialized services, equipment, and materials?

The unique educational needs of each student with a visual impairment as identified in the assessment, including needs for specialized services, materials, and equipment, shall be a part of the assessment report along with the other requirements. (See Appendix F for legal requirements.)

Assessment reports can assist in coordinating all of the assessment conducted by the multidisciplinary team. The unique educational needs, as well as the strengths identified in the reports, will provide valuable information that should be used to develop or review a student's educational program (IFSP, IEP, or ITP).

Variables Affecting Educational Needs

How does the program's staff consider the variables that affect students' unique educational needs when students with visual impairments are being assessed?

When assessing the unique educational needs for each student and providing instruction and services, one must consider the variables that influence individual needs.

These include but are not limited to:

- Congenital or adventitious visual impairments
- Visually impaired students with multiple disabilities
- Infants and preschool children
- Elementary school and secondary school students
- The nature of the student's visual impairment
- Students who are functionally blind or have low vision
- Students with other special needs

Each of these topics is discussed in the section that follows.

Congenital or Adventitious Visual Impairments

The terms *congenital* and *adventitious* identify the time of onset of a visual impairment. A congenitally visually impaired student has had a visual impairment since birth or early infancy and generally has difficulty with concepts and skills that are visual in nature. An adventitiously visually impaired student has a visual impairment that was acquired after birth or early infancy and generally already has some visual concepts and skills, depending on the age of the child when the onset of the visual impairment occurred. This student may need to integrate and acquire new visual concepts and may have needs relating to his or her adjustment to the visual impairment.

Visually Impaired Students with Multiple Disabilities

The assessment of visually impaired students with multiple disabilities requires systematic observation and an understanding of the implications of the additional disabilities on growth, development, and learning. An awareness of age-appropriate developmental and educational expectations is critical for identifying and assessing unique educational needs.

When a student with a visual impairment has other known or suspected disabilities, it is important to understand, consider, and *keep in perspective* several variables. These variables will influence the interpretation of assessment results; the determination of necessary instructional strategies, goals or objectives, or both; and the recommendations to the educational team for appropriate educational placement and related services. Variables to be considered include but are not limited to:

- The nature and extent of other disabilities (sensory, cognitive, physical, health, or behavioral) and the manner in which each one, individually or in combination, has an adverse developmental/educational impact
- The fact that the visual impairment may not correctly account for, or completely explain, the present levels of developmental and/or educational functioning observed
- The learning rate and learning style that reflect other known or suspected disabilities
- Special assistive materials, devices, and/or equipment needed to address the adverse impact of another disability
- Instructional methods or modifications or both needed to address the impact of another disability
- Adaptive or medically required positioning of the student as necessary to allow physical access to instructional materials or equipment or both
- Alternative placement or positioning or both of materials or equipment that enables or enhances access to instruction and learning
- Multiple trials using different materials to validate results and to distinguish difficulties related to a visual impairment from those of another disability (Eliciting a desired response will require the use of motivating materials and reinforcement.)
- The need to determine, during a functional vision assessment, whether observed or reported difficulties reflect an inability to see compared with an inability to interpret what is seen; e.g., a visual impairment compared with a visual perceptual or visual motor dysfunction or both (The size, distance, contrast, lighting, or other visual variables should be varied to help make this determination.)
- Additional factors that may affect learning, performance, and progress, such as attention span, range of motion, inappropriate behaviors, mood and motivation, and so forth

When students with one or more additional disabilities are being assessed, it is important to:

- 1. Consult with the educational staff, family, and eye care specialist.
- 2. Conduct a functional vision assessment, which is required for students who have remaining vision. (See Appendix F, "Legal Requirements," and Appendix B, "Assessing Vision/Low Vision.")
- 3. Conduct a reading medium assessment, which is required for functionally blind students who have the ability to read. (See Appendix F, "Legal Requirements," and Appendix C, "Determining the Appropriate Reading Medium.")
- 4. Observe the student in natural environments. There is considerable "spontaneous" information that can be obtained about vision-related behavior, including apparent strengths and limitations and apparent skills restricted by other physical, sensory, and cognitive, and/or behavioral disabilities.
- 5. Evaluate students' preferences, strengths, and weaknesses through the use of other sensory modalities and alternative learning media (tactual, visual, aural, olfactory, and so forth).
- 6. Coordinate with staff members who are knowledgeable about the student's disability or disabilities to facilitate a multidisciplinary or transdisciplinary approach as appropriate. This approach maximizes the interpretation of assessment data and the determination of appropriate instructional strategies, delivery of service, and so forth.

Instruction and services are provided by the regular class teacher, the special class teacher, or the resource specialist teacher if the teacher or specialist is competent to provide such instruction and services. (See Appendix F, "Legal Requirements.") Determination of the need for service by a teacher of the visually impaired or the orientation and mobility specialist or both, whether the service is to be direct or consultative or both, is based on assessment and the educational team's decision. This service is provided on the basis of whether the students' needs are those specialized skills that are addressed by a teacher of the visually impaired or an orientation and mobility specialist or both.

Infants and Preschool Children

Infants and preschool children who are visually impaired have differentiated educational needs. It is critical, therefore, that services begin as soon as a child is identified as having a visual impairment. Specialized support services need to be provided by staff members who have training and expertise in working with young children with visual impairments. Until these children have developed complex mental processing abilities, a difficult task without vision, they are surrounded by sounds, smells, and sensory perceptions that have little or no meaning.

Most infants and preschool children who are sighted learn through imitation and modeling. Therefore, young children with visual impairments need opportunities for experiential learning through the use of their other senses, such as associating sounds, shapes, and objects with their purposes—a process that often occurs incidentally with sighted children. Because research studies have shown that the first five years of a child's life are the most important for developing a foundation for learning, special emphasis must be given to the infant and preschool child whose opportunities to learn through visual observation are limited or nonexistent.

Assessment should include but not be limited to:

- Potential for delays in development and learning because of limited experiential opportunities in the following areas:
 - Sensory/motor development (For example, children who are visually impaired may be delayed in crawling and walking because visual cues are limited.)
 - Communication skills development (Although communication skills may not be delayed in children with visual impairments, the nature of the communication may be difficult because of the lack of visual input. For example, children may exhibit echolalia, pronoun confusion, extensive questioning, and egocentric language.)
 - Cognitive development (Young children with visual impairments are not able to conceptualize the world until they have real learning experi-

- ences. Children need opportunities to taste, touch, hear, and feel objects in their environment so that abstract concepts become meaningful.)
- Daily living skills development (Young children with visual impairments need to become contributing members of the family unit. Learning independent living skills requires the support of family members and professionals. For example, a toddler may need specialized assistance in learning to use utensils in order to eat independently.)
- Social/emotional development, including the development of self-concept and self-esteem (All young children learn through play. However, young children with visual impairments require assistance and support in learning to interact with peers; e.g., imitating, turn taking, sharing, and pretend play.)
- Acceptance of the family as the primary provider of experiential and learning activities
- Opportunities for family members to provide recommendations and to learn, from qualified personnel, the manner in which they can assist with their child's learning
- Provision for the integration of concepts and the ability to generalize
- Provision, through early and appropriate introduction to educational processes, for a smooth transition from the infant program to the preschool program and from the preschool program to the elementary school program

(See Appendix H for additional information.)

Elementary School and Secondary School Students

The unique educational needs of elementary school or secondary school students outlined in Chapter Two should be appropriately addressed so that these students may have equal access to the core curriculum. This section contains a discussion of how these students' needs can be met to accomplish this goal.

Elementary school students. Students in an elementary school program may have the same needs as those

The unique educational needs of elementary and secondary students should be appropriately addressed so that these students may have equal access to the core curriculum.

described in the previous section, "Infants and Preschool Children," particularly if these students have developmental delays or have not received needed instruction and services at the infant or preschool level. Elementary school students should be provided intensive instruction in the basic skills that they need to function independently in the regular classroom. Often, these students should be placed in a resource room for students who are visually impaired, particularly in the primary grades, to receive such instruction. (See Chapter Five for a discussion of placement in the least restrictive environment.)

Students in elementary schools should receive instruction and services that will prepare them for the secondary school level. This preparation should include career education and prevocational skills as well as proficiency standards and courses of study for graduation requirements. These students also need instruction in accepting responsibility for their educational needs.

Secondary school students. Students in a secondary school program should be encouraged to become increasingly responsible for their educational needs, including obtaining necessary adapted classroom materials, equipment, and technology and selecting and using readers. These students should receive instruction and services focused on skills that will enable the students to function independently as adults, particularly in career and vocational education skills.

Secondary school students should, as much as possible, meet the standards for all students, including the requirements of the prescribed course of study and the proficiency standards for graduation. When appropriate, these students should use alternative means (such as more time) or modes (such as large type or braille) to meet the proficiency standards or differential standards or both, as determined by the individualized education program team.

Nature of the Student's Visual Impairment

A student's unique educational needs will be influenced by the cause of or type of vision loss as well as by the student's age when the onset of the visual impairment occurred.

- A student's visual status may be stable, fluctuating, slowly or rapidly deteriorating, or capable of improvement.
- A student's visual impairment may range from a mild, moderate, or severe impairment to functional blindness. (See Appendix B for a discussion of the kinds of visual impairments.)

Students Who Are Functionally Blind or Have Low Vision

Functionally blind students will have needs related to using their other senses as primary channels for learning. Reading and writing in braille are particularly important. Students should not rely solely on their minimal vision when it is not efficient or effective for reading or writing. (See Appendix C.)

Students who have low vision will have needs related to using their residual vision as a primary channel for learning. The low vision assessment information will be particularly useful in identifying and meeting these needs.

Students with Other Special Needs

Some students will have other special needs that those conducting assessments of these students should consider. Students with other special needs include bilingual, gifted, and educationally disadvantaged students; those at risk because of specialized health care needs; and those who are living in threatened home environments or are members of migrant families. The persons conducting assessments of students with other special needs must work closely with staff from programs and agencies providing services to meet those needs. (See Appendix G, "Resources for Technical Assistance.") For example, when a bilingual visually impaired student is being assessed, the following should be considered:

- Obtaining and preparing materials in the appropriate language and medium
- Providing a translator when the teacher of the visually impaired or the orientation and mobility specialist is not bilingual
- Having an understanding and appreciation of the individual's culture

Planning and Providing Instruction and Services

his chapter presents a discussion of the unique educational needs of students with visual impairments, the roles and responsibilities of key individuals in meeting those needs, and the planning and coordination of instruction and services.

Unique Educational Needs

How does the program use the assessed unique educational needs of students with visual impairments to form the foundation for the following?

- Developing the IFSP for infants, which is family centered and includes present levels of development, family resources, priorities and concerns, outcomes desired, early intervention services, and transition steps, when appropriate (See Appendix H.)
- Developing the IEP, which includes, when appropriate, specialized services and materials and equipment (See Appendix F for legal requirements.)
- Developing transition language in the IEP, usually referred to as the Individualized Transition Plan (ITP), which includes, when appropriate, the following domains: training and education; employment; independent living; and residential, recreational, financial and economic, and social relationships (See Appendix F for legal requirements.)
- Providing appropriate instruction and services and specialized books, materials, and equipment
- Developing curriculum and implementation strategies to meet these needs

Concept Development and Academic Needs

For most students with visual impairments, it is expected that information in the core curriculum areas will be obtained as a part of instruction in the classroom. The classroom teacher should work closely with both the student with a visual impairment and the teacher of the visually impaired so that concepts that may be unfamiliar (e.g., contractions of words in reading, braille mathematics, and columns) or visual demonstrations (e.g., science experiments and examples on the chalkboard) do not slow the integrated student's progress and ability to keep up with the rest of the class. If the visually impaired student also has a learning disability, the re-

sources of a specialist in that area should also be used so that the student may perform to the maximum extent of his or her ability.

Three areas in which a student with a visual impairment may require specialized instruction are concept development, listening skills, and study skills. A discussion of these three areas follows:

Concept development. The development of concepts in sighted children is based almost entirely on their visual observations of the world (identification of objects, their relationship to objects in their environment, and their concepts of the relationships among objects). Unless these relationships are specifically taught, they cannot be totally understood by students whose visual perceptions are distorted. A comprehensive, sequential program of concept development is necessary for most visually impaired children before they can be expected to develop abstract thinking skills.

Listening skills. Individuals who are functionally blind or have low vision do not automatically develop better listening skills, which must be systematically taught and practiced. The development of good listening skills does not stop with work in auditory perception skills but extends to the development of auditory comprehension, analysis, and memory skills. Good listening skills will be needed by the student to interpret the environment when:

- The student works in the general or special education classroom.
- Materials are read to the student (by a reader or electronically).
- An older student tries to retain the maximum amount of information from lectures.

Study skills. The study techniques used by visually impaired students are so different from those used by sighted students that study skills should be taught by a specialized teacher of the visually impaired. The various formats used in reference works, such as dictionaries, encyclopedias, and atlases, coupled with the difficulty of tracking and keeping one's place in these books, demand that special attention be given to the development of these skills.

Reading and interpreting maps, charts, and graphs also require special techniques, whether the material is in braille or large print or is being read using an optical aid. Visually impaired students need to develop methods of taking notes while listening or reading; organizing notes and other materials in a medium that they can use; and developing the skills needed to acquire and use a reader.

Students with visual impairments need instruction in the use of specialized equipment and technology, such as computers with synthesized speech access, large-type screen access, braille displays, note-taking devices, and reading machines. They also need to acquire the skills necessary to access electronic forms of information, such as databases, electronic bulletin boards, and CD-ROMs. Students should be exposed to a variety of assistive and adaptive technologies and be involved in the selection of those most appropriate to their individual needs. Chapter Two contains a more complete listing of unique concept development and academic needs.

Communication Instruction

Without communication skills individuals cannot be fully independent and, therefore, must rely on others to assist them at home, at school, at work, and in society. For the individual with a visual impairment, dealing with information in a written form is particularly difficult. Unique problems arise both in the reception of printed material (reading) and in the written transmission of one's thoughts and opinions (writing). Many visually impaired students will need special instruction in one or both of these areas to develop proficiency in communication.

Depending on the visual functioning of the student, special instruction in braille, large print, and/or regular print reading techniques may be necessary. (See Appendix C.) Reading techniques are not acquired for sighted and visually impaired individuals in the same manner.

For written communication, depending on the student's visual functioning, use of a braillewriter, slate and stylus, pen and pencil, typewriter, or electronic equipment should be taught. Chapter Two contains a more complete listing of unique communication needs.

The emotional needs of visually impaired students must be addressed so that these needs do not interfere with these students' academic, social, and vocational growth.

Social/Emotional Instruction

The needs of visually impaired students in social/ emotional instruction are unique because of the effects loss of vision may have on the formation of one's selfconcept, opportunities for appropriate modeling in social situations, involvement in recreational activities, development of concepts about human sexuality, and understanding and awareness of the visual impairment.

Needed skills and understanding in these areas should be addressed to aid visually impaired students in developing the appropriate social and emotional skills necessary to function independently at home and in school and as adults in vocational, interpersonal, and family relationships.

Socialization. Students with visual impairments often need assistance in demonstrating appropriate social skills. The majority of a sighted person's social skills are learned from visual modeling. An appropriate behavior or mannerism is observed and then copied in a similar situation. Many acceptable social behaviors go unnoticed by visually impaired students unless they are taught to them with an appropriate demonstration of *how* and an explanation of *when* and *why* one would use such a behavior.

The area of nonverbal communication is often inaccessible to the student with a visual impairment. Nonverbal methods of communication are often critical avenues of social interaction for the sighted and must be directly addressed if the students with visual impairments are to incorporate them into their repertoire of social skills.

Affective education. The emotional needs of students with visual impairments must be addressed through affective education so that these needs do not interfere with these students' academic, social, and vocational growth. One of the most crucial emotional developmental tasks for students with visual impairments is the formation of self-concept. Research has shown that children and adolescents who are visually impaired have a lower self-concept than do their sighted peers.

Visually impaired infants and young children often have difficulties in recognizing themselves as individuals apart from other individuals and objects in the environment because vision plays such a crucial role in this process. The lack of feedback from a mirror, which assists sighted students in learning how they appear to others, further hinders the development of a healthy selfconcept in students with visual impairments.

As students with visual impairments become older, they may perceive themselves as devalued or incapable persons because of their inability to perform many of the common tasks required in school or on the playground. Another common occurrence is the over-emphasis of certain strengths, resulting in an unrealistic self-concept, which may later be deflated in adolescence or adulthood. Students who are visually impaired often encounter teasing by peers and must learn to handle those situations constructively while maintaining a good self-concept.

As students with visual impairments reach adolescence, many emotional issues arise, such as dealing with learned helplessness, dependency, overprotective families, and sexuality.

The emotional needs of students who are visually impaired must be addressed so that these needs do not interfere with these students' academic, social, and vocational growth.

Recreation. Students with visual impairments are often limited in the range of recreational and leisure-time activities available to them, including extracurricular activities. A need exists to expose these students to a variety of available options, which they either may not be aware of or in which they may not feel sufficiently competent to participate.

The sighted person becomes aware of many recreational activities through visual media sources. Many specific leisure skills are learned from visual modeling. In addition, students may be limited because of a lack of mobility skills, and they cannot always independently explore neighborhood options. Both individual and group recreational activities must be included in the development of recreational and leisure skills, including art and music.

Sex education. Students with visual impairments need a much more intensive and conceptually oriented sex

education program than their sighted peers do because of the lack of conceptual understanding and accurate information that cannot be gained through the visual media sources available to sighted students. Many times students who are visually impaired can verbalize sexual concepts and information accurately, but further inquiry reveals that these students have many misconceptions.

The use of tactual models is an important part of the sex education program for students with visual impairments because visual media are often not useful in the learning process. Dealing with the attitudes and emotions surrounding these students' sexuality at various stages of growth is important. The confusion that often exists regarding the stigmas attached to the disability and sexuality of individuals who are visually impaired can seriously affect these students' self-concepts.

The local sex education program must be adapted for students who are visually impaired to deal with gender identity, reproduction processes, sexual and social issues, and health and safety precautions—all in relation to each student's visual impairment and moral code. Before providing sex education, one should follow both the IEP and local policies and procedures.

Psychological implications. Many of the psychological problems faced by students who are visually impaired stem from the lack of understanding and acceptance of their individual eye condition. Many students cannot discuss their eye condition when others inquire about it. Students with visual impairments are often uncomfortable discussing their visual condition, since such a discussion forces them to acknowledge that they do, in fact, have a visual impairment. These students need to understand and embrace fully their visual impairment as part of their identity so that a healthy adjustment results and so that they are able to deal with the stereotypes and prejudice often encountered in society. If the students are knowledgeable, comfortable, and accepting of their visual impairment, then the chances of creating a similar comfortable and accepting attitude in others will be increased. Chapter Two contains a more complete listing of social/emotional needs.

Sensory/Motor Instruction

From an early age sighted children are able to use vision, imitation, and opportunities for unrestricted exploration, movement, and play to develop necessary fundamental skills in the following areas: gross and fine motor coordination, relaxation of muscles, strength, endurance, flexibility, and balance. Sighted children also are better able to develop their tactual, auditory, proprioceptive, and kinesthetic sense discrimination and integration. The lack of visual, imitative, and normal play opportunities may hinder the ability of visually impaired students to develop these fundamental skills through the natural process of development and maturation as a result of regular physical education activities.

Instruction in remediation of identified needs in this area should be provided, as needed, by a team of instructional personnel that may include the following: classroom teacher, special class teacher, teacher of the visually impaired, physical education teacher, adapted physical education specialist, orientation and mobility specialist, occupational therapist, and physical therapist.

Sensory/motor development needs overlap with several other areas of need. In some cases certain skills and abilities are prerequisite to the development of more sophisticated skills in other areas, particularly orientation and mobility, daily living skills, and career and vocational education. Chapter Two contains a more complete listing of unique sensory/motor needs.

Orientation and Mobility Instruction

The ability to understand, interact with, and move within one's physical and spatial environment is a fundamental developmental skill. This ability is one of the milestones indicative of maturation of sighted students and should be so viewed for students with visual impairments.

A visual impairment may affect an individual's opportunities for unrestricted, independent exploration, movement, and play; understanding of the physical environment and space; ability to become oriented to and to travel in various community environments; and ability to acquire basic daily living and social skills

Career and vocational education are essential components in a program for visually impaired students.

necessary for interaction with sighted individuals and for travel within the school and the community. A visual impairment may also result in voluntary or imposed restrictions on a person's activity occurring simply because of the presence of visual impairment and associated misconceptions concerning the ability of students to develop independent movement capabilities.

Specific instruction and services will be necessary to meet assessed needs in:

- Environmental and spatial concept development, body image, control, and purposeful movement
- Orientation techniques
- Self-protection skills
- Adaptive visual or nonvisual mobility techniques
- Use of residual vision for travel or orientation
- Daily living skills related to community travel and independence

For reasons of safety and liability, persons providing instruction in orientation and mobility must be qualified. For example, instruction in the use of the long cane and off-campus instruction should be provided only by a credentialed orientation and mobility specialist. Chapter Two contains a more complete listing of unique orientation and mobility needs.

Instruction in Daily Living Skills

Specific instruction in daily living skills will often be necessary if students are to function independently at home, at school, and later as adults. Sighted children learn these daily living skills from their parents beginning at a very early age. Parents of students with visual impairments are often unaware of the students' ability to acquire these skills or are reluctant to teach them because they usually have not had any training in the use of adaptive techniques.

For sighted children the acquisition of daily living skills is seen as a milestone in their development; e.g., eating and dressing independently or doing household chores. Often, students with visual impairments are not expected to be independent in this area, resulting in the performance of daily living skills that is far below the level of skills expected from sighted students. Working

closely with parents and other caretakers as early as possible is important so that they can assist in teaching these skills and following through at home. One of the most effective ways of teaching daily living skills is through the involvement of the parents by providing instruction, as appropriate, in the student's home.

For sighted children many of these skills are learned incidentally or are reinforced through visual modeling. Depending on the level of visual functioning of a student with a visual impairment, he or she should be taught these skills, using specialized or adapted methods, materials, and equipment. Teaching students to make simple adaptations is important so that they will be able to function independently in a variety of settings and situations.

Planning, instruction, and curriculum should focus on self-help needs of increasing complexity within each of the following daily living skill areas: personal hygiene, dressing, clothing care, housekeeping, food preparation, eating, money management, social communication, telephone use, written communication, time, and organization. Chapter Two contains a more complete listing of unique daily living skills needs.

Career and Vocational Instruction

Career and vocational education are essential components in a program for students with visual impairments. Even though new technology and legislation, including the Americans with Disabilities Act (ADA), that prohibits discrimination have provided more opportunities for employment, visually impaired individuals will continue to encounter many barriers in realizing their employment potential. Career or vocational education or both should therefore begin in preschool and continue through four phases: awareness, exploration, preparation, and participation.

Awareness. Awareness begins during early childhood and includes the development of an individual's self-esteem and self-concept and the beginning of an understanding of how people live, work, and play. Activities at this level should begin to assist students in developing a realistic self-appraisal of their skills, abilities, attitudes, strengths, and responsibilities, as well as of their limiting

factors. Instruction should also help students gain the skills, abilities, and attitudes they need to become successfully employed. Awareness also includes an introduction to the world of work and occupations, emphasizing those positions that are held, or could be held, by individuals who are visually impaired. These areas should be addressed both at home and in the educational setting during the early childhood and elementary school years.

Exploration. Exploration should include a broad range of career and vocational choices based on ability and interests. Required skills for specific career choices must be addressed. Students should be encouraged to explore ways in which occupational tasks could be adapted for a visually impaired person, including the use of technology. The rehabilitation counselors for the blind in the California State Department of Rehabilitation or other individuals knowledgeable about employment opportunities and adaptations for the visually impaired need to become involved. Individualized Transition Plans (ITPs) should be developed and implemented.

Preparation. Preparation should include vocational and educational training in the specific skills, abilities, and attitudes necessary for the individual's achievement in his or her career interest or choice. Training in technological and adapted devices used in the workplace should be explored. A student should be referred for services to the Department of Rehabilitation no later than the eleventh grade or after reaching a comparable chronological age.

Participation. Participation could include either paid or volunteer on-the-job training for a specific career or work experience. These experiences may provide opportunities for individuals to develop the skills, abilities, and attitudes that will be valuable in any career choice. Cooperation with local vocational education programs and local businesses is essential. (See Appendix G, "Resources for Technical Assistance.")

Knowledge of individual rights and affirmative action policies, current law—including the Americans with Disabilities Act—and the skills of self-advocacy should also be included in the career and vocational education programs.

All of these areas of learning and achievement are lifelong for everyone. Because students with visual impairments are unable to learn about these areas through visual observation, as sighted students do, training of students with visual impairments in meeting their career and vocational needs should begin in early childhood. Chapter Two contains a more complete listing of unique career/vocational needs.

Specialized Books, Materials, and Equipment

The State Legislature has provided special funds for students with low incidence disabilities: visual impairments, hearing impairments, severe orthopedic impairments, and deaf-blindness. These funds are allocated to the special education local plan area (SELPA) on the basis of the total annual count of students with a low incidence disability in the SELPA.

Students who are considered visually impaired (i.e., who meet requirements for legal eligibility for special education and related services as a pupil with a low incidence disability) are eligible to access low incidence disability funds. The eligibility is based on several criteria, which include:

- A student is identified as having a low incidence disability.
- A student has assessed needs, which result from the low incidence disability, for specialized books, materials, and/or equipment.
- The specialized books, materials, and/or equipment are required under the student's IEP.
- The item requested is specialized in some way to address the student's unique educational needs that result from the low incidence disability.
- The item is not medically prescribed, and it does not supplant items typically provided by the general or special education program or by other agencies.

To provide instruction and services to meet these assessed needs, a program must provide, as indicated by the student's IEP, specialized books, materials, and equipment, including braille, large type, recordings, tactual diagrams, and technological aids and devices. If

The degree of coordination and the knowledge and skills of those involved in implementing the educational plan will play a vital role in its success in meeting the needs of students with visual impairments.

the student's IEP so indicates, these specialized books, materials, and equipment must be provided.

Those responsible for providing materials and equipment for students who are visually impaired should follow these guidelines:

- Students who are functionally blind will need tactual
 or auditory adaptations or both in the form of braille,
 recorded materials, and technological devices to
 function optimally within a classroom. (See Appendix C.)
- Many students with low vision will often be able to use regular or large type as their primary reading medium, even though the use of adaptations such as low vision aids may be necessary; e.g., magnifiers or closed-circuit television. Recorded materials, technological devices, and braille may also be needed. (See Appendix C.)
- Students who are multiply impaired, including visually impaired, will need to use a wide variety of materials and equipment, depending on the combination and severity of the impairments. For students with multiple impairments who need a specialized curriculum, the standard adaptations (braille, typewriter, large type, and so forth) may be used as modes for learning. Students may need additional time to master the operation of equipment and the use of materials.
- Nonacademic students, infants, and preschool children will need to use concrete objects, picture representations, auditory and tactual materials, and so forth that may be more appropriate to enhance sensory stimulation, concept development, and readiness skills.

(See Appendix E, "Specialized Books, Materials, and Equipment.")

Roles and Responsibilities of Key Individuals

What do the key individuals who are involved in the assessment or provision of instruction, services, or consultation to students with visual impairments need to know about these students' unique educational needs?

The skills, abilities, and knowledge these individuals possess in carrying out their roles and responsibilities should be understood and used.

Each educational plan (IEP/IFSP/ITP) identifies the special education instruction and services, including the specialized services, materials, and equipment, needed by a student with a visual impairment. (See Appendix F for legal requirements.) The degree of coordination that can be achieved among all individuals involved in implementing the educational plan, and the knowledge and skills of these individuals, will play a vital role in the success of the total program in meeting all of the needs of students with visual impairments.

Therefore, each of the following individuals who provide instruction and services to visually impaired students must understand his or her roles and responsibilities:

Teacher of the Visually Impaired

The teacher of the visually impaired has the following roles and responsibilities:

- Has primary responsibility for specialized instruction and services required to meet the unique educational needs of the visually impaired student
- Possesses the skills and abilities necessary to provide and coordinate this instruction
- Assists the student, parents, special and regular education personnel, and sighted peers in:
 - Understanding the unique educational needs and learning characteristics of visually impaired students
 - **B**ecoming aware of services and support available from local, regional, and statewide programs for visually impaired students
 - Acquiring information regarding local, state, and national resources in the education of visually impaired students
 - Interpreting the visually impaired student's specific eye condition, the educational implications of the visual impairment, and the results of functional vision assessments to all staff and the student's family

- Confers regularly with the classroom teacher, other regular and special education personnel, parents, and others to coordinate programs and services for the student with a visual impairment
- Assists the site administrator and teachers in making environmental adjustments for the student in the school situation and in the improvement of practices and procedures
- Shares responsibility with classroom teachers in the identification of instructional areas in which the student requires assistance
- Has responsibility for selecting and obtaining largetype, recorded, or braille textbooks, supplementary materials, educational aids, and equipment needed by the visually impaired student and the classroom teacher to ensure the student's maximum participation in all classroom activities (Appropriate educational materials may be obtained from educational, clerical, or transcriber services; or they may be prepared or adapted by the teacher of the visually impaired.)
- Provides specialized instruction to the student with a visual impairment, school personnel, and parents in the use of necessary educational aids and equipment
- Provides instruction to the student with a visual impairment in the development and maintenance of skills related to the visual impairment designed to meet students' unique educational needs in the following areas, as indicated in the IEP, IFSP, or the ITP:
 - Low vision and visual efficiency skills in coordination with the eye specialist
 - Concept development and academic skills in coordination with the classroom teacher and other staff
 - Sensory/motor skills in coordination with the physical education instructor, occupational and physical therapist, and the orientation and mobility specialist
 - Communication skills in coordination with the regular teacher and the language, speech, and hearing specialist (These skills include reading

- and writing in braille and the use of appropriate assistive technology and oral/verbal language skills or auditory/listening skills or both.)
- Career/vocational education skills in coordination with career/vocational education staff and rehabilitation counselors
- Social/emotional skills and abilities in coordination with the counselors, psychologists, and classroom teachers
- **D**aily living skills in coordination with the orientation and mobility specialist, classroom teacher, and parent
- Provides assistance to the classroom teacher in academic subjects and activities of the classroom that, as a direct result of the visual impairment, require adaptation or reinforcement
- Provides assistance for any assessment
- Conducts the functional low vision assessment in coordination with the orientation and mobility specialist
- Participates in IFSP/IEP/ITP meetings for students with visual impairments
- Serves as a case manager or service coordinator for students with no additional impairments
- Shares responsibility for initial and ongoing assessments, program planning, and scheduling with parents; the student, when appropriate; the classroom teacher; principal; counselor; and other school personnel
- Schedules adequate time for assessment, instruction, planning, preparation of materials, travel, and conferences with relevant school and other key individuals (Scheduling should be flexible to meet the varying needs of each student.)
- Maintains ongoing contact with parents to assist them in the development of a realistic understanding of the child's abilities, progress, and future goals
- Provides in-service training programs for all school personnel, students, and community groups and education for parents regarding the needs, adaptations, programs, and services for visually impaired students

The orientation and mobility specialist teaches students to travel with proficiency, safety, and confidence in familiar and unfamiliar environments.

- Is aware of pamphlets, films, and other public relations materials that may be useful in developing realistic and unprejudiced attitudes toward visually impaired students
- Is aware of pertinent resource materials to assist families and school personnel
- Assists in the coordination of other personnel, such as transcribers, readers, counselors, orientation and mobility specialists, career/vocational education staff, and rehabilitation counselors
- Maintains a reference library of current professional materials
- Acquires information about current research, development, and technology and local, regional, statewide, and national resources

The teacher of the visually impaired in a self-contained classroom or school for students with visual impairments may be responsible for instruction in all subjects in addition to undertaking most of the previously listed responsibilities.

Classroom Teacher

The classroom teacher (general education, special class, or resource specialist) has the following roles and responsibilities:

- Provides classroom instruction to the student with a visual impairment
- Works cooperatively with the teacher of the visually impaired to:
 - Identify the visually impaired student's areas of educational needs and strengths, including unique educational needs.
 - Coordinate instruction and services to meet these needs and strengths.
 - Provide the teacher of the visually impaired with classroom materials that need to be reproduced in another medium in a timely manner.
 - **D**etermine mutually convenient times during the school day for scheduling the teacher of the visually impaired to work with the student.

- Modify classroom procedures and environment to meet the specific needs of the visually impaired student for participation in classroom activities.
- Exchange information concerning the student with parents and other individuals on a regular basis.

Orientation and Mobility Specialist

The orientation and mobility specialist has the following roles and responsibilities:

- Instructs students with visual impairments in the development of skills and knowledge that enable them to travel independently, to the highest degree possible, in accord with the students' assessed needs and the students' IFSP/IEP/ITP
- Teaches students to travel with proficiency, safety, and confidence in familiar and unfamiliar environments
- Possesses the skills and abilities necessary to provide and coordinate this instruction
- Provides consultation and support services to families, regular and special education teachers, other school personnel, and sighted peers
- Confers regularly with parents, classroom teachers, physical education teachers, and/or other special education personnel to assist in home and classroom environmental modifications, adaptations, and considerations and to ensure reinforcement of appropriate orientation and mobility skills that will encourage the student with a visual impairment to travel independently in these settings
- Works with the teacher of the visually impaired to conduct the functional vision assessment as it relates to independent travel
- Conducts assessments which focus on both long-term and short-term needs of the student
- Includes in the assessment report the needs and strengths of the student and an estimate of the length and frequency of service necessary to meet identified needs
- Prepares sequential and meaningful instruction geared to the student's assessed needs, IEP goals and objectives, functioning level, and motivational level

- Prepares and uses equipment and materials for the development of orientation and mobility skills; e.g., tactual maps, models, distance low vision aids, and long canes
- Transports students to various community locations as necessary to provide meaningful instruction in realistic learning environments
- Is responsible for teaching safe techniques to use at all times and in all environments while fostering maximum independence
- Provides orientation and mobility instruction, where appropriate, in the following areas:

Body imagery

Laterality

Environmental concepts

Gross and fine motor skills related to independent travel

Sensory awareness, stimulation, and training

Spatial concepts

Compass direction concepts

Sighted guide procedures

Basic protective and information gathering techniques

Orientation skills

Map skills

Cane skills

Use of residual vision

Low vision aids related to travel skills

Residential travel

Travel in business districts and malls

Procedures for crossing streets, including traffic control signals

Use of public transportation systems

Procedures for use of the telephone for information gathering and for emergencies

Procedures for interacting with the public

Knowledge and application of community address systems

Procedures for travel and independent functioning in places of public accommodation

Skills of daily living

Sensory/motor skills in coordination with the physical or occupational therapist and teacher of the visually impaired

- Evaluates students' progress on an ongoing basis
- Keeps progress notes on each student
- Participates in necessary parents' conferences and meetings
- Provides in-service training to regular and special education personnel, sighted peers, and family members concerning the orientation and mobility needs of the student with a visual impairment and appropriate methods and procedures for interacting with the individual who is visually impaired that will foster maximum independence and safety

Parent, Guardian, or Conservator

The parent, guardian, or conservator has the following roles and responsibilities:

- Is fully informed as to why an assessment is being conducted and how it is to be conducted
- Provides information relating to the assessment, including medical information
- Gives written informed consent before an individual assessment is conducted and may receive a copy of the assessment report when requested
- Is knowledgeable about the assessment results prior to the IFSP/IEP/ITP meeting, enabling him or her to participate more effectively in the meeting
- Participates as a member of the IFSP/IEP/ITP team by:

Stating the observation of needs, expectations, interests, and goals for the child

Cooperating with school and other personnel to determine goals and objectives for the child

Accepting responsibility for assisting in the implementation of goals and objectives

Participates in ensuring that an appropriate educational program is planned and implemented to meet

the individual needs of the child and maintains communication with school personnel to accomplish this goal, including providing feedback and suggestions about the instruction and services being provided

- Provides, in cooperation with school personnel, appropriate support in the home and community to improve the students' daily living skills, career and vocational skills, orientation and mobility skills, and other developmental skills as a supplement to special instruction and services to meet the child's unique educational needs
- Participates in and provides ideas for formal and informal parental education programs that are designed to assist parents in understanding and meeting the needs of their children with visual impairments
- Has information and assistance from school personnel and other sources to acquire the knowledge and skills necessary to participate in meeting the unique educational needs of the children (See Appendix G, "Resources for Technical Assistance.")

The Student Who Is Visually Impaired

The student with a visual impairment has the following roles and responsibilities:

- Is involved, unless it is clearly not appropriate, in all decisions about his or her education
- Is encouraged to provide information about his or her unique educational needs, strengths, and expectations as a part of the assessment
- Participates, when appropriate, in the development of the IEP/ITP
- Chooses a career or a postsecondary educational program as a personal goal to be the basis for transition planning in a secondary student's IEP/ITP
- Gives feedback and suggestions about the instruction and services being provided
- Has high expectations and works toward achieving them to become as independent as possible

Eye Specialist

The eye specialist, a licensed ophthalmologist or optometrist, makes vision-related recommendations to the classroom teacher, teacher of the visually impaired, orientation and mobility specialist, other professional staff, and parents. Some optometrists and ophthalmologists specialize in low vision impairment and have the necessary equipment and expertise to assess low vision and prescribe low vision aids. (See Appendix B, "Assessing Vision/Low Vision," for more detailed information.)

Regular or Adapted Physical Education Specialist

The regular or adapted physical education specialist has the following roles and responsibilities:

- Is knowledgeable about unique educational needs in the area of sensory/motor skills
- Works closely with the teacher of the visually impaired, the orientation and mobility specialist, and the occupational or physical therapist to share needed information and coordinate services that may be provided by these individuals
- Is familiar with specialized or adapted equipment in the area of physical education for students who are visually impaired

Occupational or Physical Therapist

The occupational or physical therapist has the following roles and responsibilities:

- Is aware of unique educational needs of individuals who are visually impaired, particularly in the areas of sensory/motor skills
- Works closely with the teacher of the visually impaired, orientation and mobility specialist, and physical education staff to coordinate services
- Assesses and provides direct or consultative therapy services

School Nurse

The school nurse has the following roles and responsibilities:

 Acts as a liaison with health professionals, special educators, other school personnel, and parents The early childhood specialist works cooperatively with the family, the teacher of the visually impaired, and other members of the transdisciplinary team, including members of other agencies, when appropriate.

- Coordinates vision and hearing screening, including making referrals and providing hearing screening to students with visual impairments
- Provides assistance in determining the need for additional health assessment; e.g., physical examinations and referrals to other agencies, including California Children Services and Regional Centers

Program Specialist

The program specialist has the following roles and responsibilities:

- Has in-depth knowledge of visually impaired students' unique educational needs and experience in providing education for these students
- Provides technical assistance and in-service training to all personnel serving visually impaired students and their parents
- Is knowledgeable about local, state, and national resources for individuals who are visually impaired
- Is knowledgeable about legal requirements regarding visually impaired and other students with low incidence disabilities (See Appendix F.)
- Is especially knowledgeable about program options and services available within the region

Early Childhood Specialist

The early childhood specialist has the following roles and responsibilities:

- Works with the infant or preschooler with a visual impairment and his or her family in a home-based or center-based program
- Works cooperatively with the family, the teacher of the visually impaired, and other members of the transdisciplinary team, including members of other agencies, when appropriate, to:
 - Identify each child's areas of unique needs related to his or her visual impairment and other needs, including those of the family.

Coordinate services to meet these needs.

Identify each child's need to receive services/ consultation/evaluation/assessment from the teacher of the visually impaired.

- Works with the teacher of the visually impaired to provide toys and other materials and equipment which are appropriate to the needs of the child
- Includes the teacher of the visually impaired in all IFSP meetings, including planning for transition
- Determines a mutually convenient time for the teacher of the visually impaired to work with the child and to coordinate services
- Modifies the environment and activities with the assessment of the teacher of the visually impaired to meet the specific needs of the child
- Exchanges information on progress with the family, the teacher of the visually impaired, and other members of the transdisciplinary team on a regular basis

Specialist in Career/Vocational Education

The specialist in career/vocational education has the following roles and responsibilities:

- Participates as a contributing member of the ITP team
- Facilitates participation of outside services or agencies or both in ITP meetings
- Coordinates with other programs or agencies, such as WORKABILITY I, II, III, IV; Job Training Partnership Act (JTPA); Regional Occupational Centers/ Programs (ROC/Ps); and regional centers
- Is aware of unique educational needs in career/ vocational education and in other related areas, including appropriate career and vocational assessment tools
- Consults and works with the student, teacher of the visually impaired, orientation and mobility specialist, and parents in determining realistic goals and instruction in this and related areas
- Is knowledgeable about the expanding career/ vocational education opportunities currently available to individuals who are visually impaired, including the use of technological aids and adapted and assistive aids and devices
- Collaborates with the rehabilitation counselor for the blind in the local office of the California Department

- of Rehabilitation and with other related staff as appropriate
- Acts as liaison to the ITP team regarding local and regional vocational programs

Language, Speech, and Hearing Specialist

The language, speech, and hearing specialist has the following roles and responsibilities:

- Is aware of the student's functional vision, unique educational needs in the areas of communication, particularly language development, concept development and academic skills, and sensory/motor skills
- Works closely with the educators of visually impaired students to coordinate assessment, instruction, and services, particularly in oral/verbal language and communication skills or auditory/listening skills or both

Technology Specialist

The technology specialist has the following roles and responsibilities:

- Has detailed knowledge of current trends in educational curricula, media, technology, and strategies to make these learning tools accessible to students with disabilities, including those with visual impairments
- Has access to databases and other information concerning current specialized or adaptive technology, media, and materials
- Works with other educators and specialists and makes recommendations to assess the need for and the provision of needed technology, including training, and facilitates the modification of educational technologies used by schools so that they may be used by students with visual impairments

Counselor, Psychologist, or Social Worker

The counselor, psychologist, or social worker has the following roles and responsibilities:

 Is aware of the unique educational needs of the student with a visual impairment or the student's family

- Works closely with the teacher of the visually impaired and/or orientation and mobility specialist to coordinate assessments and services
- Is knowledgeable about special considerations for students with visual impairments when conducting assessments and providing services (See Appendix F for legal requirements.)

The psychologist has unique training and expertise in generic assessment techniques that can be useful to others conducting assessments.

Certified Braille Specialist (Transcriber)

The certified braille specialist (transcriber) has the following roles and responsibilities:

- Holds Library of Congress Certification in Literary Braille for preparing materials in braille
- Adheres to standards of the Braille Authority of North America when preparing braille materials in mathematics, music, foreign language, or computer notation and demonstrates knowledge of specific braille codes
- Adheres to Code of Braille Textbook Formats and Techniques, 1977¹
- Is knowledgeable about embossing tools, techniques, and media and understands the concepts to be presented when preparing tactual materials
- Adheres to the transcribing standards and procedures for large type of the National Braille Association and qualifies as a typist according to the standards of the local educational agency when preparing materials in large type
- Is knowledgeable about techniques used to prepare large-type materials appropriately with enlarging photocopiers and scanners with computer software
- Has the necessary competencies to prepare aural media, including knowledge of recording equipment, and the ability to comprehend and present materials at an appropriate pace and in a well-modulated voice

¹ Code of Braille Textbook Formats and Techniques, 1977. Compiled under the authority of the American Association of Workers for the Blind, Association for Education of the Visually Handicapped, and the National Braille Association. Louisville, Ky.: American Printing House for the Blind, 1977.

The certified braille specialist works closely with the teacher of students with visual impairments to ensure that materials are transcribed appropriately to meet the students' needs.

- Works closely with the teacher of students with visual impairments to ensure that materials are transcribed appropriately to meet the needs of the students in the classroom
- Is knowledgeable about resources and agencies that provide materials and services to students with visual impairments, identifies needs, and locates and procures required specialized books and materials
- Demonstrates knowledge of and ability to operate a variety of specialized equipment and software used in the production of braille and large-type materials, including braillewriters, computers, specialized software, and peripheral equipment such as embossers and scanners
- Receives, records, distributes, and maintains inventories of specialized books, materials, and equipment needed by students who are visually impaired

Reader

The reader has the following roles and responsibilities:

- Possesses the skills necessary to read print materials to students with visual impairments, including:
 - Knowledge in the use of recording equipment Good articulation and pronunciation and a pleasant
 - voice
 - Ability to follow the directions of the teacher and student
 - Ability to meet deadlines
- Works under the supervision of the teacher of the visually impaired when the reader is a sighted student or volunteer

Aide/Paraprofessional/Instructional Assistant

The aide/paraprofessional/instructional assistant has the following roles and responsibilities:

- Assists, as directed by the teacher of the visually impaired or other credentialed staff, in the following areas:
 - Facilitating the classroom organization and environment

- **R**einforcing the individualized instruction provided by the teacher to achieve IFSP/IEP/ITP goals and objectives
- Planning and preparation of materials demonstrating understanding of specific techniques and skills used to adapt educational materials for use by individual students
- Is familiar with the unique needs of students in the class

Ancillary Staff in Residential Programs

The roles and responsibilities of staff members will vary, depending on the agency in which they work:

- Dormitory and ward personnel, including psychiatric technicians in state hospitals, are responsible for the health, safety, and well-being of students when the students are not in school. Since these staff members engage in activities with students similar to those normally provided by parents, these personnel should be aware of the unique needs of students and coordinate with instructional staff, particularly in the area of daily living skills, so that consistency in expected behavior occurs.
- Food services staff members are responsible for planning, preparing, and serving meals to students.
 Diets should be monitored so that they meet the special needs of students. Food services staff should coordinate with instructional staff, when appropriate, in reinforcing students' eating skills.
- Health services staff members are responsible for the health and medical needs of students and should communicate with appropriate personnel regarding the changing health and medical needs of students, particularly concerning medications and special health care needs.

Coordination of Instruction and Services

How does the program coordinate instruction and services to visually impaired students?

To be effective, all instruction and services should be coordinated to focus on the student who is visually impaired. Meetings concerning the individualized education program and the program itself should form the foundation for the coordination of instruction and services.

It is important, however, that all key individuals involved develop formal and informal ways to communicate with one another on an ongoing basis to ensure that

the individualized education program is implemented in a coordinated manner. Since many key individuals are often involved in the education of students with visual impairments, one staff member should be assigned to facilitate this coordination among all key individuals, including the parents. In most cases, the teacher of the visually impaired will have this responsibility when the visual impairment is the student's primary disability.

Organizing and Supporting Instruction and Services

his chapter presents a discussion of the provision of services on a regional basis. Also discussed are administrative roles and responsibilities, placement in the least restrictive environment, class sizes and caseloads, qualified personnel, staff development and parent education, guidelines for facilities, emergency procedures, materials and equipment, transportation, and program improvement.

Regionalization

How does the program ensure that appropriate instruction and services are provided through a full range of program options and support services on a regional basis?

Because of the unique educational needs and low incidence disabilities of students with visual impairments, regionalization is often necessary when the site, district, county, or special education local plan area (SELPA) is unable to meet the students' unique needs.

Regionalization is an approach that involves SELPAs and other agencies within a geographic region in working together more effectively and efficiently to improve the coordination, provision, and quality of specialized program options and services to students with low incidence disabilities, their parents, personnel who serve them, and administrators responsible for their programs.

For students with visual impairments, this support is planned and designed to address local needs in the following broad areas:

- Providing assistance in specialized assessment, instruction, curriculum, and support to identify and address the unique educational needs of students with low incidence disabilities, as outlined in Chapter Three and Chapter Four of these guidelines For example, in order to provide staff who are knowledgeable about assessing the unique educational needs of visually impaired students, it is often effective to provide for regional assessment teams of appropriately trained individuals or other ways of sharing assessment expertise regionally.
- Providing a full range of specialized program options

Because of the unique educational needs and low incidence disabilities of students with visual impairments, regionalization is often necessary when the site, district, county, or SELPA is unable to meet the students' unique needs.

and support services, including technology, to meet the identified unique educational needs of these students, as outlined later in this chapter
For example, in order to provide the needed specialized instruction and services by appropriately credentialed staff in an efficient and cost-effective manner, a SELPA may find it necessary to cooperate with adjacent SELPAs and states, particularly in rural areas. Other options include contracting with private agencies for services, using telecommunication, and using staff members who are dually credentialed as teachers of the visually impaired and as orientation and mobility specialists.

 Providing specialized personnel development for all staff serving these students and for their parents to assist them in meeting the unique educational needs of their children
 For example, local, regional, and statewide needs assessments for staff development and parent education often do not reflect the specialized needs of staff and parents of students with low incidence disabilities. In order to provide this specialized in-service training or parent education, it is often necessary to

New programs for visually impaired students should be planned and existing programs modified so that the assessment, instruction, and services necessary to meet these students' varied unique educational needs, including needed specialized materials and equipment, can be provided through coordinated administrative services on a regional basis.

use a regional or statewide approach.

The Special Education Division of the California Department of Education can assist local agencies in developing regional programs to address local needs in providing appropriate support services to visually impaired students, their families, and staff responsible for their programs.

(See Appendix G, "Resources for Technical Assistance," and Appendix F, "Legal Requirements.")

Administrative Roles and Responsibilities

In this section the roles and responsibilities are examined for staff from the special education local plan area, the supervisor of personnel serving students with visual impairments, and the site administrator or designee.

Special Education Local Plan Area (SELPA)

Each SELPA submits a local plan to the State Superintendent of Public Instruction which includes the following:

- A description of services to be provided by each district and county office, demonstrating that the SELPA is of sufficient size and scope to ensure that all individuals with exceptional needs, including students with visual impairments, have access to services and instruction appropriate to meet their needs, as specified in their education plans (IFSP/IEP/ITP) (Responsibility for provision of and consultation to special education programs and support services for students with visual impairments must be clearly defined, including, when necessary, provisions for coordinating with adjacent SELPAs, other public agencies, and other states and contracting with private agencies.)
- A description of the governance and administration of the plan (The roles and responsibilities of SELPA administrators, district and county, are unique to each SELPA. See Appendix F for legal requirements.)

Supervisor of Personnel

The supervisor of personnel serving students with visual impairments has the following roles and responsibilities:

Is knowledgeable about the unique educational needs
of students with visual impairments and the roles and
responsibilities of the personnel being supervised so
that he or she may assist in improving the instruction
and services being provided to meet these needs

• Is knowledgeable about the other areas outlined in this chapter, as well as funding sources (see Appendix E) and legal requirements (see Appendix F), so that he or she can be responsive and supportive of improving instruction and services based on the changing needs of students, staff, and parents

Site Administrator or Designee

The site administrator or designee has the following roles and responsibilities:

- Is knowledgeable about the needs of students with visual impairments and the roles and responsibilities of the regular teacher, the teacher of the visually impaired, and other staff working with these students
- Assists in the coordination of all instruction and services in the school, including regular course of study, instruction, and special services, such as bilingual education and special education, including alternative instructional strategies and proficiency standards
- Assists in promoting and supporting the least restrictive environment for students by helping the school in accepting the student, special education staff, and parents of students with visual impairments as a part of the school (This acceptance can be supported through coordinated staff in-service training and parent education and by providing information to all students in the school about visual impairments through classroom activities, cross-age tutoring, and student assemblies.)
- Provides facilities that are appropriate to meeting the unique needs of students who are visually impaired, as outlined later in this chapter

Placement in the Least Restrictive Environment

How does the program ensure that students with visual impairments are appropriately placed in the least restrictive environment on the basis of their educational needs?

When making placement decisions, the IEP team should:

- Focus on the assessed educational needs and strengths of each student with a visual impairment.
- Determine a placement in the least restrictive environment in which these needs can appropriately be met.
- Change the placement as the needs of the student change.

The least restrictive environment for each student may vary according to the intensity of the student's needs. Students with needs that require intensive specialized instruction and services should be placed where these can be provided. Placing a student in an inclusive setting, when the student does not have the skills or the necessary services to achieve and adapt in that setting, can actually be more restrictive. However, students with visual impairments who have the necessary skills and services should be placed, to the maximum extent appropriate, with students who are not disabled. Placement in an inclusive setting, however, does not mean that the student is automatically included. It is important to prepare the student for inclusion. Sighted peers and staff should also be prepared so that they have the knowledge, skills, and attitudes necessary to help them in accepting the student in a nonprejudicial manner.

Often, an ideal placement does not exist where all of the student's needs can be met at once. At this point the planning team should look at the student's entire educational career, including possible future program options that can be expected to meet these needs better.

Students with a visual impairment as their sole or major disability are grouped with peers who are not disabled in order to provide appropriate academic and behavioral models and appropriate levels of expectation for achievement.

The IEP team, in making important placement decisions, should be creative, particularly in rural areas, in deciding on the option that will best meet the needs of each visually impaired student. Included here would be exploring programs in neighboring SELPAs, adapting existing programs and services, and exploring services provided by public and private agencies.

A policy on least restrictive environment has been adopted by the State Board of Education. This policy paper and technical assistance in this area are available from the California Department of Education (see Appendix G).

Program Options

The following section describes the recommended minimum options in a range of specialized services and programs available to students with visual impairments. From these options the IEP team selects the most appropriate placement in the least restrictive environment for each student. Options are listed according to the intensity of specialized instruction and services provided by the teacher of the visually impaired, from the least intensive to the most intensive; and they are identified by nationally accepted terminology, rather than by funding terminology, because options may be funded in a variety of ways, depending on local needs. Other specialized services, including orientation and mobility, transcriber services, and readers, are also provided to students in any of these settings in accordance with the IEP.

Itinerant teacher of the visually impaired. Students are enrolled in a general education classroom in the school they would attend if they were not visually impaired, or they are enrolled in resource specialist programs or special classes if they have additional disabilities. Assistance, instruction, and consultation are provided by the itinerant teacher of the visually impaired to students according to their needs for these specialized services. For those children below school age, the itinerant teacher of the visually impaired can provide intervention strategies in the home or in a preschool setting.

Resource room for students who are visually impaired. Students placed in a resource room have more intensive needs that, ordinarily, require daily support services and specialized instruction provided by a teacher of the visually impaired. Students also attend general or regular special education classrooms for varying amounts of the school day according to their individual needs, as determined by the educational team,

including the teacher of the visually impaired and the classroom teachers.

Special classroom for students who are visually impaired. Students placed in a special classroom ordinarily require specialized instruction for all or most of the school day. Instruction that emphasizes both subject-matter skills and the development of special skills is provided by a teacher of visually impaired students in coordination with other appropriate staff. Students may profit by participating in the regular classes in selected academic subject areas or in nonacademic areas as appropriate.

Special school for students who are visually impaired. Students who need intensive services throughout the day attend a special school that serves the unique needs of visually impaired students. These students require specialized instruction and support services beyond those that can be provided in local school programs. Special school programs may be offered on a nonresidential or residential basis. These programs include:

- A special school for students who are visually impaired in a local educational agency
- The California School for the Blind (See Appendix D.)

Students enrolled in special school programs should have access to programs in local schools to provide opportunities for inclusion as appropriate.

Nonpublic schools and agencies. A nonpublic school may be a program option when the student's needs cannot be met by a public agency. Services may be provided by nonpublic schools and agencies when such services are not available in a public school; e.g., orientation and mobility instruction, instruction in daily living skills, and infant and preschool services. (See Appendix G, "Resources for Technical Assistance," for additional information.)

Program Options for Infants and Preschool Children

Various options exist at the infant and preschool program level in California. All program options, however, may not be available in each community. The Parents should be provided with opportunities to meet with other parents of visually impaired children to exchange ideas and information.

following options are cited as examples, not as a complete list:

- Public school programs for infants and preschoolers with disabilities
- Nursery schools or preschools or both that are supported by parents, private organizations, adult education centers, and others
- Public and private home-based programs
- State preschool programs
- Children's centers, migrant child care centers, and campus children's centers
- School-age parenting and infant development programs
- Head Start programs
- Family information and counseling services, such as:
 - Providing information and assistance to parents regarding their child's cognitive, physical, social, and emotional development
 - Referring children to the appropriate educational facilities
 - Assisting infant and preschool teachers in methods of integrating and educating young children who are visually impaired

Parents should be provided with opportunities to meet with other parents of children with visual impairments to exchange ideas and information and also to meet and consult with adolescents and adults who are visually impaired. Information about programs should be disseminated to parents through agencies and individuals involved in the identification and provision of services for children with visual impairments.

Class Sizes and Caseloads

How does the program establish class sizes and caseloads that allow for providing specialized instruction and services based on the educational needs of students with visual impairments?

It is essential to establish class sizes or caseloads for the teacher of the visually impaired and for the orientation and mobility specialist that are appropriate to assess and provide the instruction and services necessary to meet the unique educational needs of students who are visually impaired. It is also important to monitor the workload of support service personnel, such as transcribers (certified braille specialists) and readers.

It is recommended that programs use one or both of the following options in determining class sizes and caseloads:

Option I. Developing a process for establishing and monitoring the class size or a caseload of the teacher of the visually impaired or of the orientation and mobility specialist depending on the time required for:

- **Providing instruction based on the severity or intensity of students' needs**
- Consulting with the classroom teacher and other staff, including consultation when the student is not receiving direct instruction
- Consulting with medical personnel and community resource persons
- Consulting and assisting parents
- Traveling necessary to carry out the responsibilities
- Securing and preparing needed specialized materials, media, and equipment
- Attending meetings, preparing reports, and recordkeeping

Include in the process ongoing communication between the staff member and the responsible supervisor or administrator to ensure that students are receiving appropriate instruction and services in accordance with the IFSP/IEP/ITP and the changing needs of students.

Option II. Establish local caseloads and class sizes based on the age and the severity of the needs of the students being served and the instruction and services needed to meet these needs.

The following ranges for class sizes and caseloads are based on state and national averages and may be used as a general guide in establishing local caseloads and class sizes. These ranges should not be viewed as establishing minimum state requirements.

Provision of necessary qualified staff is a critical component in providing appropriate assessments, instruction, and services.

Type of program	Class size and caseload ranges
Resource room (one teacher and one aide)	8 to 12 students
Special classrooms (one teacher and one aide):	
Infants or preschool	4 to 8 students
Kindergarten through third grade	6 to 10 students
Fourth through twelfth grade	8 to 12 students
Multiple disabilities	3 to 7 students
Itinerant teacher of the visually impaired	8 to 12 students
Orientation and mobility specialist	8 to 12 students
Home-based infants or preschool age	13 to 17 children

Local caseloads and class sizes of staff may fall above or below these ranges according to the time requirements outlined in Option I.

Qualified Personnel

How does the program provide qualified certificated and noncertificated personnel who have the skills and abilities necessary to conduct assessments and to provide instruction and services that meet the educational needs of students with visual impairments?

Provision of necessary qualified staff is a critical component in providing appropriate assessments, instruction, and services.

Certificated Personnel

Programs for students who are visually impaired provide the necessary appropriately credentialed professional staff, including the following (see Chapter Four for roles and responsibilities and Appendix F for legal requirements):

- Teachers of the visually impaired who are credentialed in this area and possess the skills and abilities necessary to meet the unique educational needs of the students with visual impairments they serve (See Appendix G, "Resources for Technical Assistance." Visually impaired students are taught by teachers who have credentials in this area. See Appendix F for legal requirements.)
- Orientation and mobility specialists who are credentialed in this area and possess the skills and abilities necessary to meet the unique orientation and mobility needs of the students with visual impairments they serve (See Appendix G.)
- Assessment personnel, including a psychologist, as appropriate, who are knowledgeable about assessing students who are visually impaired (See Chapter Three for additional information regarding assessment personnel.)
- Other professional staff, including, but not limited to, general and special education teachers; program specialists; language, speech, and hearing specialists; physical and occupational therapists; adapted physical education specialists; school nurses; early childhood specialists; recreation therapists; social workers; guidance counselors; and vocational specialists

All staff should be knowledgeable about their roles and responsibilities in providing and coordinating needed instruction and services as outlined in Chapter Four. Personnel serving preschool children should have competencies and experience in the areas of education for children who are visually impaired and in early childhood education.

Noncertificated Personnel

Each local or regional program for students with visual impairments should also provide, as needed, transcribers, readers, paraprofessionals, and other personnel who possess the skills necessary to meet the unique educational needs of the students who are served.

Students who use braille as their primary reading medium should have equal access to the same educational materials at the same time as their sighted classmates. Programs for students with visual impairments should provide the services of certified braille specialists to ensure that daily assignments, tests, work sheets, and textbooks are available to these students. Students must be provided with braille and tactual materials that have been transcribed in accordance with established codes and formats for literary, Nemeth (math and science), music, and computer notation.

Students who use large type as their primary reading medium should have equal access to the same educational materials at the same time as their sighted classmates. Local or regional programs for students with visual impairments should provide these students with the services of knowledgeable transcribers (certified braille specialists) to ensure that daily assignments, tests, work sheets, and textbooks have been transcribed or enlarged according to accepted standards.

Staff Development and Parent Education

How does the program provide staff development and parent education that are based on a needs assessment reflecting the unique educational needs of students with visual impairments?

Staff development, based on a continuing needs assessment, is provided for all special and regular education personnel regarding the unique educational needs of visually impaired students and the roles and responsibilities of the staff in meeting these needs. (See Chapter Four for a discussion of the roles and responsibilities of staff and Appendix F for legal requirements.)

Parent education based on a continuing needs assessment is provided in every local or regional program for students who are visually impaired and is designed to:

 Assist parents in their roles and responsibilities to meet the special developmental needs of their children with visual impairments through ongoing two-way communication. (See Chapter Four for a discussion of the roles and responsibilities of parents.) Provide parents with needed information pertinent to the education of their children, including information regarding the range of educational program options and related agencies and services at local, state, and national levels. (See Appendix F for legal requirements.)

Because of the low numbers of staff and parents of students with visual impairments, their specialized needs are often not addressed or are given a low priority, especially when staff development and parent education are based on a general needs assessment. Collaboration on a regional level is often necessary to meet these specialized needs.

Guidelines for Facilities

How does the program provide for the design or modification of facilities to enhance the provision of instruction and services to students with visual impairments?

Facilities should be provided to meet the unique educational needs of students who are visually impaired. Resource rooms or special classrooms used in programs for the students who are visually impaired should be the same as the standard size for regular classrooms of the school system and should include:

- Appropriate lighting meeting minimum standards, including lighting which is adjustable to meet the varying needs of students who have low vision
- Adequate storage space for specialized books, equipment, and materials
- A separate area for listening activities
- Furniture and chalkboards (black or green) with nonglare surfaces
- A sufficient number of electrical outlets for specialized equipment
- A location on the site that allows convenient accessibility for all students with visual impairments who are attending regular classes

The teacher of the visually impaired should provide assistance in designing and modifying facilities to meet the needs of students who will be using them.

The following guidelines should be considered:

- Appropriate bathroom facilities should be provided for multiply disabled and primary-age students.
- Adequate working space, including space for safe storage of equipment and materials, with proper lighting for individual instruction and counseling should be available on a consistent basis in each school attended by a student with a visual impairment who is being served by an itinerant teacher.
- Adequate desk and storage space should be provided in classrooms for the visually impaired student's specialized books, materials, and equipment.
- Office space should be available for itinerant teachers and orientation and mobility instructors. Such office space should include adequate storage areas, telephones, answering service, and clerical assistance.

Adequate working space for the transcriber should be provided. Special equipment should be available as needed for production and duplication of materials, including computers, braille embossers, specialized software for production of braille and large type, computer printers, tape-recording equipment and duplicators, enlarging photocopiers, braillewriters, and braille binding and duplicating equipment.

Programs for preschool children who are visually impaired should be housed in a school or facility where:

- Other preschool programs are available for nondisabled children to provide integration opportunities for the children who are visually impaired.
- Bathroom facilities have been designed or adapted for young children.
- Playground facilities are adjacent to the classroom and include space for appropriate toys and equipment.

Emergency Procedures

Students with visual impairments, like all other students, should receive instruction and practice in responding appropriately and calmly to emergencies by participating in fire and earthquake drills, bus evacuation drills, and other emergency procedures, including possible specialized health care needs. Local codes and ordinances regarding emergency procedures must be followed.

Staff should be prepared to handle emergencies, including a knowledge of the specific procedures to follow. The teacher of the visually impaired or the orientation and mobility specialist should provide assistance to the students and staff in evacuation routes and procedures. The school nurse should assist with procedures to follow for medical emergencies.

Materials and Equipment

How does the program provide the materials and equipment necessary to meet the unique educational needs of students with visual impairments as specified in the IFSP/IEP/ITP?

Materials and equipment are provided as indicated in the IFSP, IEP, or ITP to meet the unique educational needs of students with visual impairments. (See Appendix F for legal requirements.)

Sufficient time must also be allocated for the transcriber or teacher of the visually impaired to locate, prepare, and disseminate materials and equipment for each student.

Because expensive materials and equipment are often not available from other sources, funds at the local level must be budgeted to ensure that necessary books, materials, and equipment are provided, coordinated, and maintained. The intent of the Legislature is that, to the extent to which funding is available, school districts and county offices give first priority to expenditures to provide specialized books, materials, and equipment that are necessary and appropriate for the individualized education programs of pupils with low incidence disabilities.

Materials and equipment purchased with federal or state funds by local educational agencies remain the property of the state and may be reassigned by the Each program serving visually impaired students has an ongoing process to evaluate the effectiveness of the program in meeting students' needs.

Clearinghouse for Specialized Media and Technology (CSMT) when they are no longer being used locally. It is important that a process for tracking materials and equipment purchased to implement the IEP of students with visual impairments be maintained so that this information may be reported to CSMT. (See Appendix E for sources of funding and Appendix F for legal requirements.)

An organized, cost-effective, and coordinated system for acquiring, coordinating, disseminating, and maintaining these special materials and equipment should be operated from a central location, with one individual assigned this responsibility. CSMT has developed and disseminated inventory systems for use on IBM (or compatible) and Macintosh computers to assist in meeting these responsibilities.

All efforts should be made to coordinate the sharing of books and materials with other programs for students with visual impairments in the state as well as nationally.

Transportation

How does the program provide for transportation that is suitable to the health and safety needs of students with visual impairments?

When students with visual impairments are transported to special classes or schools:

- Transportation is arranged appropriate to the health and safety of the students, including consideration of the travel time involved.
- Drivers are made aware, through continuing inservice training by the orientation and mobility instructor or teacher of the visually impaired, of unique orientation and mobility needs that may be useful, including emergency, drop-off, and pick-up procedures.
- Students are encouraged to travel independently to and from school when they have the necessary orientation and mobility skills.

Program Improvement

How does the program improve its effectiveness in identifying, assessing, planning, and providing instruction and services to meet the unique educational needs of students with visual impairments?

Each program serving students with visual impairments has an ongoing process to evaluate the effectiveness of the program in meeting students' needs and using the results for program improvement. The evaluation process should encompass all of the areas outlined in this document, using the standards and the key questions in each chapter and the "Self-Review Guide" (Appendix A) as the basis for the review. It is particularly important that this process focus on student outcomes and other evidence of student learning when a program's effectiveness is being determined. The unique educational needs outlined in Chapter Two may be used to establish standards of expectations and to measure student outcomes based on these expectations.

When conducting a self-review, program planners should develop specific questions for interviewing administrators, special and general education staff, and parents and for reviewing students' records and other documentation. Interview questions should be openended, beginning with *how, what, who,* and *when* as appropriate. This approach will provide more valuable information than simple yes or no questions for determining and improving the effectiveness of a program. This approach can also clarify a program's strengths and areas that need improvement.

These guidelines are considered when programs serving students with visual impairments are monitored by the California Department of Education. The Department also provides technical assistance to parents, teachers, and administrators in the implementation of these guidelines, including assistance in conducting self-reviews, validation reviews, and program improvement. (See Appendix G, "Resources for Technical Assistance," and Appendix F, "Legal Requirements.")